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## Indonesia Female Principal Performance Appraisal: Gender Perspective

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## Indonesia Female Principal Performance Appraisal: Gender Perspective

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### Abstract

**Research Aims:** This study aimed to determine the direct influence of communication style and individual competence on female principals' empowering leadership and performance in Yogyakarta, Indonesia.

**Design/methodology/approach:** The respondents of this study were 220 teachers from 3 accredited high schools with female principals in Yogyakarta, Indonesia. The questionnaire was analysed using structural equation modelling with AMOS to determine the relationship between variables and using Sobel Test to test leadership as a mediating variable.

**Research findings:** The results of this study show that communication style and competence have a positive and significant effect on leadership and performance, leadership has a significant effect on performance, and leadership acts as a mediating variable. The results also indicate that gender acts as a moderating variable by strengthening the relationship between leadership and principal performance.

**Theoretical Contribution/Originality:** The contribution of this study is to develop and examine the direct and indirect relationship between communication style, competence, gender, leadership, and performance of principals.

**Managerial Implication in the South East Asian Context:** The results of this study can help principals design effective leadership development programs by selecting the appropriate leadership style to improve the performance of school principals.

**Research limitation & Implications:** This research is limited by the number of respondents and the number of predictor variables of leadership and performance. This research has important implications for future research on the joint effects of contextual factors, personal characteristics, and social network attributes in the gendering leadership in the education sector.

**Keywords:** communication style, competence, gender, leadership, performance

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## INTRODUCTION

Gender leadership has been a topic of great interest in the last three decades. Gender is a similar cultural concept that makes a difference in terms of roles, behaviour, mentality, and emotional characteristics between men and women who develop in society (Koenig et al., 2011). From a gender perspective, there is a stigma that men are considered superior to women (Klenke, 2007; Steffens et al., 2014). This stigma places women as second-class citizens, including in leadership (Thompson, 2017). Based on this stigma, the view that power and leadership are male domains manifested in masculine identities emerged (Reicher et al., 2005). Until now, people still tend to be sceptical of women leaders (Davies et al., 2005). This is reflected in the percentage of female leaders who are still far below male leaders. As a result, resistance to women's leadership is growing.

In the education sector in Yogyakarta, there is a significant difference between the number of male and female principals. The percentage of female principals is less than the percentage of male principals. Based on data from the Yogyakarta Provincial Education, Youth and Sports Office in 2019, it can be seen that the number of teachers at the senior high school level who are male is 1201 teachers. Meanwhile, there were 1471 female teachers. However, there are fewer female principals than male principals. The total number of female principals at the senior high school level in Yogyakarta was 24 schools or 11.11%, far less than the real male principals, which amounted to 192 schools or 88.89% (BPS Kota Yogyakarta, 2020). One of the factors that cause a small number of female principals is lower performance.

The basis of the performance improvement mechanism in this study uses a grand theory, namely the theory of a psychological perspective. This theory is a synthesis of various scientific views related to behavioural psychology and cognitive psychology. Luthans & Avolio (2009) stated that the guide to studying behaviour in organisations is to use a stimulus-response approach. This model was developed by Luthans into S-O-B-C (Stimulus-Organism-Behaviour-Consequences), namely the consequences that indicate the orientation to be achieved through work behaviour. Every behaviour is directed towards improving performance. Based on the psychological perspective theory, leadership, communication style, and competence can be placed as a stimulus (S) for the formation of performance as a response (R/B) which is based on the motives and attitudes that develop in the organisation (O).

A school principal is expected to have sufficient competence to improve the performance of leaders and school performance. Competence in leadership is an important requirement for the effectiveness or success of leaders in carrying out their respective roles, duties, functions, authorities and responsibilities (Boyatzis, 2011). Range et al. (2014) stated female principals have low social competence and supervision than males. Women leaders also have different communication styles from male leaders (Herring, 2008). The communication style of women who are loved by employees and their work environment in building a relationship is an added value (Leman & Tenenbaum, 2013).

This study uses leadership as a mediating variable on the effect of communication style and competence on the performance of female principals. One of the efforts to improve performance is to improve the leadership quality of female principals. Leadership in an organisation is a process in which a leader praises and sets an example for his followers in an effort to achieve organisational goals. One type of leadership that is widely used by women is transformational leadership. The main function of a transformational leader is to provide services as a catalyst of change but at the same time as a controller of change. Khan and Vieito (2013) reported that women are more likely to have a more transformational leadership style than men. It was further reported that men are more optimistic and tend to take risks than women in general (Thompson, 2017). Men are significantly more likely to want to develop than women.

Lastly, the researcher used gender as a moderating variable in this study. The moderator variable is the variable that modifies the relationship between IV and DV. The purpose of the moderator variable is to measure the strength of the relationship between IV and DV. In this study, if gender is a moderating variable between competence and communication style (IV) and performance (DV), then the relationship between competence and communication style will be stronger or weaker for female or male leaders.

So to answer the research gap, the purpose of this study is to determine the direct influence of communication style and competence on the leadership and performance of female principals and analysis the role of leadership as a mediator in the relationship between communication styles and competence on the performance of the female principal in Yogyakarta. This study also analyses the role of gender as moderation in the relationship between leadership and the performance of female principals.

This research makes a potential contribution to the advancement of management theory and practice. This study inserts gender as a moderating variable. As is well known, gender issues are sensitive issues for people who adhere to paternalism, so the results of this study can provide an overview of the performance of female school principals that can be used as a reference to improve the quality of performance and education in Indonesia, and especially in the Southeast Asia Region.

## LITERATURE REVIEW

### *Communication style*

Leadership is a process or a person's style to influence others so that other people want to follow what a leader wants (Koning & Van Kleef, 2015; Prabhu & Hegde, 2012). Delivering messages from a leader requires an appropriate communication style so that messages conveyed to subordinates can be received well. An effective leader generally has the ability to communicate effectively so that they more or less will be able to stimulate the participation of the people they lead. The principal's communication style is a behaviour in conveying messages to employees or teachers with the language style, customs, education level, and insights they have in order to be able to attract attention and be understood so that organisational goals can be understood and implemented properly. However, usually speaking, female principals tend to be hesitant, receptive to directions from others, accept directions from others, support and entertain others, and contribute to solutions to relational and interpersonal problems.

The communication ability of the principal is one of the competencies that must be possessed by a principal. The ability to communicate is very important because, in the process of interaction with school members in a certain educational unit, a principal is required to be able to communicate ideas or strategic ideas that will be implemented within the scope of his school so that students, educators in the school can implement them with full responsibility (Vadeveloo et al., 2009). Therefore, both the leadership factor and the principal's communication ability are closely related to the effectiveness of the implementation of school governance (management) which will affect performance. Research on the relationship between supervisor communicator competence and leadership style on performance was conducted by Madlock (2008). The results showed that there was a strong relationship between supervisor communication style and leadership style and performance (Madlock, 2008). Another study conducted by Cullen and Gordon (2014) was designed to determine whether there is a positive correlation between the leadership and communication styles of nurse managers. The results showed a positive and statistically significant correlation between the leadership and communication style of the nurse

manager (Cullen & Gordon, 2014). However, other research states that communication style has no significant effect on leadership (Çetin et al., 2012) and performance (Abrell-Vogel & Rowold, 2014; Luo et al., 2016). So it can be concluded that there are still differences in the results of previous studies, which allows the results of this study to fill the existing research gap.

Based on the above discussion, the following hypothesis is proposed:

**H1.** *There is a positive and significant relationship between communication style and leadership of female principals.*

**H2.** *There is a positive and significant relationship between communication style and performance of female principals.*

### **Competence**

Competence is a basic characteristic of a person that enables them to perform superiorly in their work. Competence is a trait or characteristic needed by an officeholder in order to carry out a position properly, or it can also mean the characteristics/characteristics of a person that are easily seen, including knowledge, expertise, and behaviour that allow for good performance as well (Eagly & Johannesen-Schmidt, 2001; Ogunfowora, 2014).

The principal, as a leader in educational institutions in the school, is required to master a number of certain abilities and skills in order to become skilled in leading the school. The principal is someone who is formally assigned to lead the school with the ability to guide, direct, nurture, be an example, inspire a common vision, challenge existing processes, call others to action and raise enthusiasm. In short, the principal should empower all teachers, staff and education personnel, students, and all school stakeholders to consciously and responsibly carry out activities both individually and collectively to achieve particular school goals and national education goals that have been formulated and agreed upon in advance (Porch, 2018). The Regulation of the Minister of National Education Number 13 of 2007, concerning Principal Standards, identified five dimensions of competence: personality, managerial, entrepreneurship, supervision, and social (BPS-Statistics Indonesia, 2017). A school principal must possess these five competencies so that he can become an effective leader.

The competence of women leaders affects their performance. In many cases, female leaders (e.g., principals) prove themselves capable of carrying out their duties successfully. However, in some cases, negative issues still occur, so it seems that it is still necessary to identify both theoretically and empirically the strength of women leaders. Research conducted by Wang, Liu

and Liu (2019) found that competence has a positive effect on leadership. This is in line with the results of research conducted by Aboyassin and Abood (2013), which examined the effect of competence on leadership styles in leaders in Jordanian government institutions. Competence affects the leadership style, which will affect individual performance and organisational performance (Aboyassin & Abood, 2013; Bayram & Zoubi, 2020; Wei et al., 2010).

Misra and Srivastava (2018) state that competence plays an important role in determining employee effectiveness and satisfaction with leadership and leader performance. Leaders with good competencies can develop team competencies so as to facilitate higher organisational performance and greater job satisfaction among employees. However, the results of research conducted by Zhang et al. (2018) state that competence does not have a significant effect on individual performance. Vasset, Marnburg and Furunes (2011) suggest that performance appraisal is needed to determine the factors that can affect leader performance.

Based on the above discussion, the following hypotheses are proposed:

- H3.** *There is a positive significant relationship between competence and leadership of female principals.*
- H4.** *There is a positive significant relationship between competence and performance of female principals.*

### ***The role of leadership as mediation***

Leadership and performance are important research topics in the literature, and gender leadership is a new and developing issue (Eagly & Carli, 2003). Because leadership is typically associated with agency and masculinity, the prevalent stereotypes that women's strengths lie in nurturing and warmth create psychological barriers to women's participation in leadership. The importance of gender for good performance in the education sector is important for human resource policy and strategic management (Eagly, 2007).

In a public organisation, success or failure in carrying out tasks is influenced by leadership and is supported by adequate organisational capacity for implementing good organisational governance (Klenke, 2007; Rost & Barker, 2000). The performance of a leader is determined by the leader's success in directing, encouraging and managing all elements in the group or organisation to achieve a desired organisational goal. Leadership is influential in determining organisational goals, motivating follower behaviour to achieve goals, influencing the interpretation of the events of its followers, organising activities to achieve goals, maintaining



cooperative relationships and group work, and obtaining support and cooperation from people outside the group or organisation (Steffens et al., 2014).

Meanwhile, women's leadership is a public issue that is frequently discussed. There are still many issues related to women leaders at all levels of organisations and institutions. There are still many people who think that women are less capable than men because they are considered too emotional and lacking in power (Brooks & Hébert, 2006; Dunn et al., 2014; Eagly, 2005, 2007). The education sector is considered not only as a major element in the efforts to educate the nation but also as a product of social construction; thus, education also contributes to the formation of gender relations in society. The presence of women leaders is likely to accelerate the achievement of gender justice, proving their ability as leaders can inspire the community so that, in time, gender inequality in society diminishes. Hussein et al. (2016), in their research of 40 academics, explained that there was a significant positive relationship between leadership and leader performance. By measuring the role of gender in the leadership of female school principals, it is expected to improve the performance of female principals, which in turn can improve the quality of education.

Based on the above discussion, the following hypothesis is proposed:

- H5. There is a significant relationship between leadership and the performance of female principals.*
- H6. Leadership mediates the relationship between communication style and performance of female principals.*
- H7. Leadership mediates the relationship between competence and performance of female principals.*

### ***The role of gender as moderation***

Quality-oriented leadership is a prerequisite for realising school goals. This leadership ability includes the principal's ability to work with or through administrative staff and academic personnel (Coleman, 2007). Therefore, a principal should understand correctly the vision of the institution he or she leads, be able to cultivate quality work and be able to empower all existing potentials to support school quality achievement programs. Thomas (2010) conducted a study on the differences in leadership styles of male and female principals. Several teachers interviewed stated that they preferred school principals who were flexible, friendly, considerate and not arrogant in making decisions. Women leaders tend to use a democratic approach that encourages subordinates to come forward and develop their thinking while leaders participate in carrying out their duties. Conversely, male leaders tend to lead autocratically, with

subordinates required to do what the superiors order without any emotional approach (Thomas, 2010).

It has been argued that women have great potential for equal positions with men at the top of an organisation because women's typically relationship-oriented leadership style will help to maintain the job satisfaction of their subordinates and lead to achieving organisational goals more effectively (Coleman, 2007; Eagly, 2007). In modern conditions like now, where many teachers have gone through the education level to reach the undergraduate to the postgraduate stage, their performance is identical to the rights they get, which is an important point. When female school principals want to achieve their vision and mission easily, they need to consider a good communication style and adequate competence to achieve good productivity and performance (Razi et al., 2014; Shahbaz et al., 2019). Poor performance of female school principals because the principal is considered less capable of carrying out her duties, including in terms of inappropriate communication styles and inadequate competence (Kirchner, 1993).

Based on the above discussion, the following hypothesis is proposed:

**H8.** Gender moderates the relationship between leadership and performance of female principals.

Figure 1 presents the research framework and hypothesis.

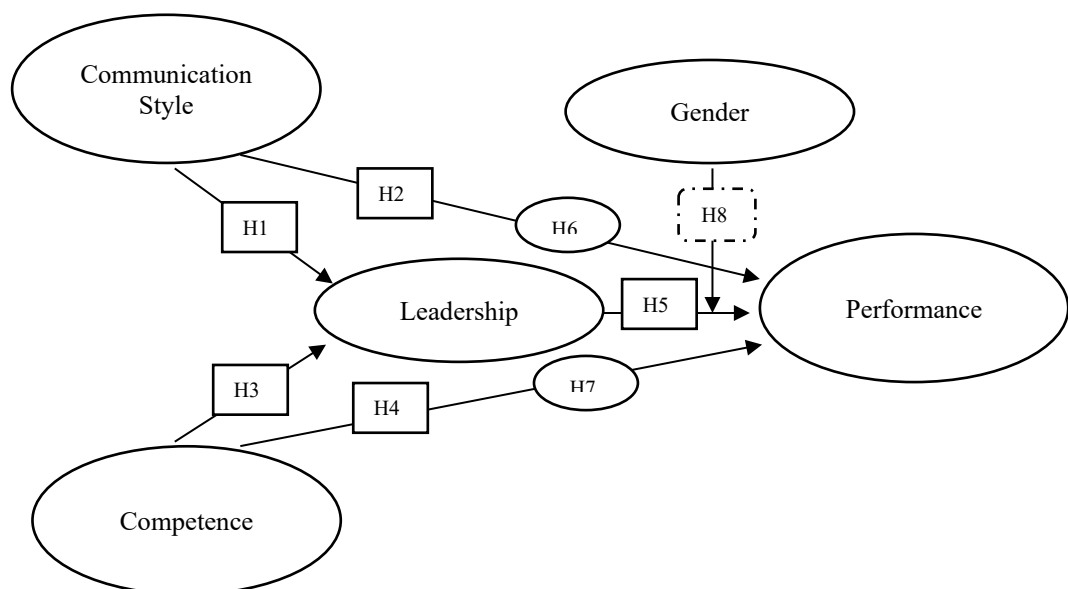


Figure 1. Research framework

## RESEARCH METHODS

### *Sample and data collection*

Respondents in this study were 220 teachers in three accredited high schools with female principals in Yogyakarta, Indonesia. The selection criteria were: 1) the principal has served more than two years, and 2) the school received many awards during the last two years prior to the research. Sampling in this study used a census sampling technique by including all members of the population to be selected as sample members (Ferdinand, 2006; Ghozali, 2017; Hair et al., 2010; Nunnally, 1978). The data were collected in August 2020.

This study focuses on primary data collected through a structured questionnaire developed and adapted from existing literature. A 7-point Likert scale was used (1 = strongly disagree; 7 = strongly agree). The questionnaire consists of 44 items. The initial six items (a–f) are demographic items. Communication style dimensions were assessed with items CS1–CS8 (Boies et al., 2015). Examples include: “The principal always speaks optimistically with enthusiasm” and “The principal always deals with employees/teachers personally”. Competence dimensions were assessed with items CT1–CT8 (Kovjanic et al., 2012; Madlock, 2008). Examples include: “The principal has good competence, which is the effectiveness of the leader’s performance in completing her work” and “The principal has the knowledge, skills and basic values which are reflected by the principal in the habit of thinking and acting consistently”. Leadership dimensions were assessed with items LD1–LD8 (Madlock, 2008; Shumate, 2016). Examples include: “The principal always applies supervision to the tasks carried out” and “The principal always delegates tasks according to the abilities and expertise of subordinates”. Gender dimensions were assessed with items GE1–GE6 (Fritz & van Knippenberg, 2017). Examples include: “Female principals are reliable” and “Female principals perform well”. Performance dimensions were assessed with items PM1–PM8 (Beltrán-Martín & Bou-Llusar, 2018; Chen et al., 2014). Examples include: “The principal always does the work according to the predetermined target” and “The principal has good performance so that the school can get many awards”.

### *Data analysis*

The demographic characteristics of respondents were processed using SPSS 22. Furthermore, the results of this study were analysed with structural equation modelling (SEM) using AMOS 22.0 to test the direct effect between variables and the effect of moderating variables (Hayes, 2017). AMOS was chosen because the questionnaire data used were quite large, with as many as 220 respondents. The Sobel test is used to test the significance of the indirect effect of the

independent variable on the dependent variable through the mediating variable (Allen, 2017; Sobel, 1987).

## RESULTS AND DISCUSSION

### *Demographic characteristics*

Demographic information on respondents' gender, marital status, age, income, education level and work experience are presented in Table 1.

Table 1. Demographic characteristics

Demographic factors	Frequency	(%)
Gender		
Male	141	64.1
Female	79	35.9
Marital Status		
Married	134	60.9
Single	86	39.1
Age		
21 - 30	21	9.6
31 - 40	116	52.7
41 - 50	53	24.1
51 - 60	30	13.6
Income (IDR)		
1.500.000 – 1.999.999,-	8	3.6
2.000.000 – 2.499.999,-	18	8.2
2.500.000 – 2.999.999,-	77	35.0
3.000.000 – 3.499.999,-	67	30.5
> 3.500.000	50	22.7
Education Level		
Diploma	14	6.4
Bachelor's degree	146	66.3
Master's degree	53	24.1
Doctor's degree	7	3.2
Work Experience		
1 – 5 years	37	16.8
6 – 10 years	100	45.5
11 – 15 years	43	19.5
16 – 20 years	24	10.9
> 20 years years	16	7.3

As shown in Table 1, the respondents are as follows: 64.1% male, 60.9% married, 52.7% in the age range of 31–40 years, 35.0% with income in the range of IDR 2,500,000–2,999,999, 66.3% with a bachelor's degree, and 45.5% with 6-10 years of work experience.

### *Robustness tests*

Measurement of the validity and reliability of the questionnaire used confirmatory factor analysis (CFA). Results of the validation test showed that all indicators are valid because they have estimated standardised regression weights > 0.5. The reliability test is conducted to

determine the extent to which the results of measuring instruments using the same instrument will produce the same data. A reliable instrument can provide an identical score every time (Kerlinger & Lee, 2000). In Table 2, the item reliability value can be seen in the composite output reliability. The composite reliability scores of all constructs ranged from 0.71 to 0.88, above the acceptable minimum value of 0.6 (Bagozzi & Yi, 1988). All these results imply that validity and reliability values are met for the construct. The measurement model provides a reasonable fit for the data ( $\chi^2 = 325.445$ ;  $df = 139$ ;  $p = 0.038$ ,  $\chi^2/df = 2.29$ ;  $GFI = 0.94$ ;  $CFI = 0.90$ ;  $TLI = 0.95$ ;  $RMSEA = 0.058$ ), with all conformity indicators within an acceptable range (Hair et al., 2006).

Table 2. Descriptive statistics

Variable	Mean	SD	1	2	3	4	5
Communication style	4.01	0.48	1				
Competence	4.13	0.53	0.32**	1			
Leadership	4.06	0.51	0.34**	0.23**	1		
Gender	4.38	0.46	0.21**	0.45**	0.31	1	
Employee performance	4.14	0.61	0.27	0.26	0.15	0.22	1
Composite reliability			0.72	0.77	0.71	0.88	

Notes:  $n=531$ . \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\*  $< 0.001$

### ***Hypothesis testing direct effect between variables***

After the overall structural model is fitted to the data, the next step is to test the research hypotheses using structural equation modelling (SEM). This hypothesis testing is done by looking at the estimated results of the research model. Suppose the CR value  $> 1.96$  and the P-value  $\leq 0.05$ , the hypothesis is supported. If the CR value is  $< 1.96$  and the P-value  $\geq 0.05$ , the hypothesis is not supported (Hair et al., 2010). The model estimation results can be seen in Table 3.

Table 3. Model estimation results

	Direct Effect	Estimate	S.E.	C.R.	P	Decision
Leadership	<--- Communication style	.710	.113	5.151	***	Supported
Leadership	<--- Competence	.117	.024	2.952	***	Supported
Performance	<--- Communication style	.135	.189	4.702	***	Supported
Performance	<--- Competence	.158	.082	2.709	***	Supported
Performance	<--- Leadership	.570	.214	2.201	.028	Supported

Notes:

S.E: Standard errors; C.R: Critical ratio; P: Probability (\*\*\* p is significant at 0.01 level).

Table 3 presents the estimated results of the proposed path coefficients. Based on the path analysis, it is known that the P-value  $\leq 0.05$ ) and the CR value  $> 1.96$ . Thus, the direct effect hypotheses between variables (H1-H5) are supported. Results for each hypothesis are presented below.

Communication style has a significant effect on the leadership of female school principals in Yogyakarta. This is because the probability value is less than 0.05 (\*\*\*)  $< 0.05$ ) and the CR value is 5.151 (CR  $> 1.96$ ). A positive estimate value of 0.710 means that the effect is positive; that is, if the communication style increases, the leadership also increases. The results of this study support the results of previous studies that communication style plays a positive role in improving leadership (Cullen & Gordon, 2014). If a woman becomes a leader in a different environment, she will unconsciously bring the values of her native culture, which have implications for the formation of a leadership communication style. The skill of female principals in listening and negotiating with teachers is a determining factor in communication competence. Female principals need to actively collaborate in their way of communicating by creating a two-way channel so that teachers and employees can internalise the vision created as a team. Thus, by communicating, teachers and employees can be active in sharing, affirming, and evaluating their ideas. Çetin et al. (2012) studied the typology of communication styles, where leadership is a social process that involves relationships between individuals and is a prerequisite for improving the performance of principal managers.

Communication style has a significant effect on the performance of female principals in Yogyakarta. This is because the probability value is less than 0.05 (\*\*\*)  $< 0.05$ ) and the CR value is 4.702 (CR  $> 1.96$ ). A positive estimate value of 0.135 means that the effect is positive; that is, if the communication style increases, the performance also increases. The results of this study support the findings of previous research, namely, communication style has a direct effect on the performance of employees (Ngoc Khuong & Huu An, 2016). Good communication style results in a good performance. Communication formed by a team will have a positive impact on performance. Leaders with a good communication style will be able to create a good performance (Ngoc Khuong & Huu An, 2016). Effective leadership is considered a fundamental factor for organisational success. Human resources are the most important asset in an organisation, especially leaders. The principal, as a capable leader, can provide guidance for the organisation and lead teachers and employees to achieve the desired goals. Therefore, organisations need to have leaders who have efficient communication to lead and motivate their employees so that they can achieve organisational goals. Communication and interaction between principals and teachers and employees can be emphasised as the main pillar of school

success. Thus, in the face of challenges, the communication power of a principal can enable teachers and employees to overcome the obstacles they face.

Competence has a significant effect on the leadership of female principals in Yogyakarta. This is because the probability value is less than 0.05 ( $*** < 0.05$ ) and the CR value is 2.952 ( $CR > 1.96$ ). A positive estimate value of 0.117 means that the effect is positive; that is, if competence increases, leadership also increases. Competence is a prerequisite for effective leadership (Flauto, 1999). Each of these leadership styles is highly correlated with the competence of the leader. The principal's competence is an inherent characteristic of leadership. Thus, with good competence, female principals can predict the behaviour and abilities of teachers and employees broadly in all situations and working conditions they face. By placing principals who do not have appropriate competencies, the resulting performance will not match expectations. Thus, female principals must be able to influence, direct, supervise, and motivate other employees with their various advantages. A leader must have adequate competence and good communication with subordinates in order to know all the obstacles teachers and employees face in achieving goals.

Competence has a significant effect on the performance of female principals in Yogyakarta. This is because the probability value is less than 0.05 ( $*** < 0.05$ ) and the CR value is 2.709 ( $CR > 1.96$ ). A positive estimate value of 0.158 means that the effect is positive; that is, if the individual's competence increases, the performance also increases. The results of this study support the results of previous studies that competence has a positive relationship with organisational performance. Female principals who have good competence tend to be able to improve their performance. Schools are places where the process of human development and formation takes place through the right guidance and direction; thus, the professional competence of school principals plays an important role in improving the quality of learning in schools. To be able to become a professional, the principal must find her identity and actualise herself according to the abilities and rules of the principal. Thus, competent principals have the expertise and responsibility to improve their performance, which in turn can improve school performance.

Leadership has a significant effect on the performance of female principals in Yogyakarta. This is because the probability value is less than 0.05 (0.028), and the CR value is 2.201 ( $CR > 1.96$ ). A positive estimate value of 0.570 means that the effect is positive; that is, if leadership increases, then performance also increases. A transformational leadership style has a significant relationship with performance (Prabhu & Hegde, 2012). A leader must have the ability to

manage subordinates so they can achieve good performance. Jalilzadeh and Pouya (2016) explained that leadership has a positive relationship with performance. Ogunfowora (2014) also explained that there is a positive relationship between leadership and performance. Thus, the principal should have the ability to lead all human resources (teachers, employees, facilities, and infrastructure) in a school so that they can be used optimally to achieve goals. Thus, the principal's leadership is the principal's ability to make efforts to influence the existing resources and environment, either directly or indirectly, to be able to achieve school goals effectively and efficiently.

### ***Hypothesis Testing the Mediating Role of Leadership***

To determine whether the indirect effect of X to Z through Y is significant or not, the Sobel test is performed. This test is used to determine whether the relationship through a mediating variable is significantly capable of acting as a mediator in the relationship (Allen, 2017). The Sobel test was chosen because the number of samples used in the study was quite large (Ghozali, 2017). The hypothesis is supported if it has a z value  $\geq 1.98$  with a significance level of  $\leq 0.05$  (Preacher & Leonardelli, 2001; Solimun & Fernandes, 2017). The results of the Sobel test can be seen in Table 4.

Table 4. Sobel testing result

Mediating Effect	A	B	SEA	SEB	Zvalue	p-value	Decision
CS to PM through LD	0.710	0.470	0.113	0.214	2.073	***	Supported
CT to PM through LD	0.117	0.470	0.024	0.214	2.002	***	Supported

Notes:

CS: Communication style; CT: Competence; LD: Leadership; PM: Performance.

A: Raw (unstandardised) regression coefficient for the association between independent variable and mediator; B: Raw coefficient for the association between the mediator and the dependent variable (when the independent variable is also a predictor of the dependent variable); SEA: standard error of A; SEB: standard error of B; Zvalue: Sobel value; p-value: probability (\*\*\*)  $\leq 0.01$

Table 4 presents the results of the Sobel test on the effect of leadership in mediating the relationship between communication style, competence and performance. As shown in the table, with a Z value  $> 1.98$  with a significance level of \*\*\* or  $\leq 0.01$ , the results indicate that leadership is significantly able to mediate the relationship between communication style, competence and performance. Thus, the proposed mediating hypotheses (H6 and H7) are supported. However, because the independent variables (communication style and competence) have a significant effect on the dependent variable (performance), the role of the mediating variable (leadership) becomes partial mediation. The results of this study can help school principals to design effective leadership development programs by choosing the appropriate leadership style. Appropriate leadership can be achieved by organising training and self-development programs. Furthermore, school principals can also design strategies to satisfy,



retain and motivate teachers and school staff (Asrar-ul-Haq & Kuchinke, 2016). For more details, see Figure 2 below.

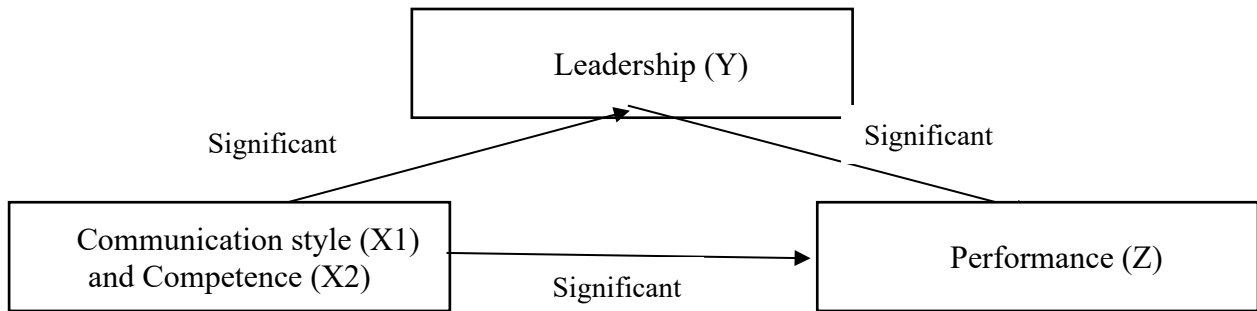


Figure 2. Leadership variable as partial mediation

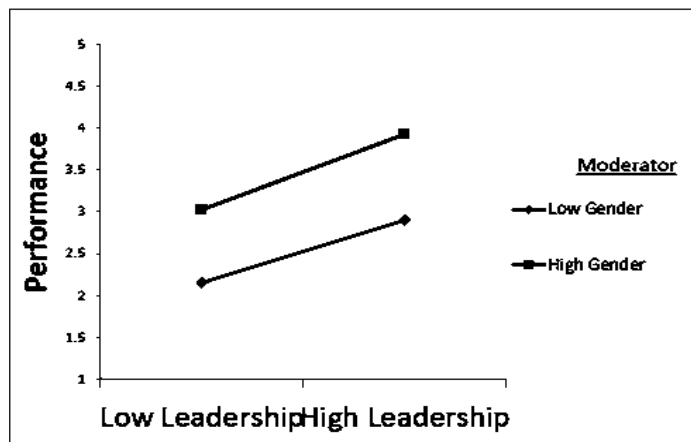
**Hypothesis Testing the Moderating Role of Gender**

Hypothesis 8 was tested using a moderation test, which is carried out by making a single variable to determine the interaction between the independent variable and the moderating variable (Hayes, 2017). Figure 3 shows the role of gender in strengthening the positive relationship between leadership and the performance of female principals.

Table 5. Interaction moderation

Moderating Effect			Estimate	S.E.	C.R.	P
ZPM	<---	ZLD	.411	.074	4.332	***
ZPM	<---	ZLD_x_ZGE	.041	.038	3.114	.012
ZPM	<---	ZGE	.471	.083	2.966	***

Notes:  
 C.R: Critical ratio; P: Probability (\*\*\* p is significant at 0.01 level).  
 LD: Leadership; GE: Gender; PM: Performance.



**Gender strengthens the positive relationship between Leadership and Performance.**

Figure 3. The role of gender as a moderating variable

Gender moderates the relationship between leadership and performance of female principals. Based on the output of the analysis results in Table 5, the interaction variable between leadership and gender has a positive and significant effect on performance ( $P < 0.05$  and  $CR > 1.96$ ). Thus, it can be concluded that gender moderates the relationship between leadership and the performance of female principals. Indonesia is characterised by a unique culture, including regard to gender. Leaders are embedded within such cultural settings that establish expectations for how to act, interact, and transact to achieve desired outcomes (Eagly & Carli, 2003; Thompson, 2017). Gender thus represents a salient influence on how leaders grow their leadership and create societal benefits (Eagly, 2007). Gender refers to “societies’ beliefs about whether members’ biological sex should determine the roles that they play in their homes, business, organisations and communities” (Aidis & Schillo, 2017).

Female principals as educational leaders need to have both a vision for building their schools and the ability to maintain their schools. These skills will impact their ability to recruit talented educators and create programs that can provide students with a positive learning environment (Kovjanic et al., 2012). Good educational leadership is shown by the ability and readiness of female principals as leaders in schools to influence, guide, direct, and mobilise school staff so that they can work effectively in order to achieve predetermined educational and teaching goals (Shumate, 2016).

## CONCLUSIONS

### *Theoretical implications*

The results of this study show that communication style and competence have a positive and significant effect on leadership and performance, leadership has a significant effect on performance, and leadership acts as a mediating variable in the effect of the relationship between communication style and competence on performance. The results also indicate that gender acts as a moderating variable by strengthening the relationship between leadership and principal performance, consistent with previous studies. Overall, the results of this study support the idea that gender can help improve the performance of women, including women who become leaders in public service areas such as the education sector (Hoogendoorn et al., 2013). Consistent with recent research on gender, our research supports the idea that gender identification or feminist identification is a unique construct and that it can shape women's reactions to stereotypes (Morkevičiūtė & Endriulaitienė, 2020). This finding is very interesting because it opens up new interpretations of the roles or views of higher groups regarding gender.

This study resulted in a new modification of the previous research framework by inserting the leadership variable as a mediating variable and gender as a moderating variable affecting the relationship between competence and communication style and its effect on the performance of school principals at the organisational level.

### ***Practical implications***

For female principals, possessing competencies and a good communication style are essential managerial skills for effective management. The performance of female principals in accredited A high schools is influenced by communication style, competence, and leadership. To achieve good-quality performance, these three factors must be improved. Female principals should apply transformational leadership and a democratic and two-way communication style and should always seek to improve the quality of their competence. The results of this study offer feedback and input for school principals, staff and teachers, and the Yogyakarta Education Office in their efforts to improve the performance of school principals.

Based on the result of this study, several steps are advisable for policymakers in the field of education and Indonesian educational institutions, especially in Yogyakarta, to manage female principals' performance. These steps include 1) providing public speaking training to female principals; 2) providing leadership training to female principals; 3) increasing competence by holding competency workshops for female principals, and 4) providing more opportunities for women to become school principals.

### ***Limitations and Future Research***

We acknowledge several limitations of this study. First, this study is limited in the number of respondents to 220 people drawn from accredited A high schools; thus, the results of the study are less accurate than if it had been aimed at a wider population. Secondly, while this research is limited to the communication style and individual competency variables, there remain many other factors that also influence leadership and performance. This research has important implications for future research on the joint effects of contextual factors (culture), personal characteristics (gender), and social network attributes (size) in the gendering leadership in the education sector. Future research is needed on the differences in performance between male and female leaders in the education sector in Yogyakarta, Indonesia.

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## References

- Aboyassin, N. A., & Abood, N. (2013). The effect of ineffective leadership on individual and organizational performance in Jordanian institutions. *Competitiveness Review*, 23(1), 68-84.
- Abrell-Vogel, C., & Rowold, J. (2014). Leaders' commitment to change and their effectiveness in change – A multilevel investigation. *Journal of Organizational Change Management*, 27(6), 900-921.
- Aidis, R., & Schillo, R. S. (2017). Gender, leadership and venture capital: measuring women's leadership in VC firm portfolios. *International Journal of Gender and Entrepreneurship*, 9(2), 110–135.
- Allen, M. (2017). Sobel Test. In *The SAGE Encyclopedia of Communication Research Methods*.
- Asrar-ul-Haq, M., & Kuchinke, K. P. (2016). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks. *Future Business Journal*, 2(1), 54-64.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bayram, P., & Zoubi, K. (2020). The effect of servant leadership on employees' self-reported performance: Does public service motivation play a mediating explanatory role? *Management Science Letters*, 10(8), 1771-1776.
- Beltrán-Martín, I., & Bou-Llusar, J. C. (2018). Examining the intermediate role of employee abilities, motivation and opportunities to participate in the relationship between HR bundles and employee performance. *BRQ Business Research Quarterly*, 21(2), 99-110.
- Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *Leadership Quarterly*, 26(6), 1080-1094.
- Boyatzis, R. E. (2011). Managerial and leadership competencies: A behavioral approach to emotional, social and cognitive intelligence. *Vision*, 15(2), 91-100.
- BPS-Statistics Indonesia. (2017). Statistical Yearbook of Indonesia 2017. *BPS-Statistics Indonesia*.
- BPS Kota Yogyakarta. (2020). Kota Yogyakarta Dalam Angka 2020. In *BPS Kota Yogyakarta*.
- Brooks, D. E., & Hébert, L. P. (2006). Gender, race, and media representation. In *The SAGE Handbook of Gender and Communication*.
- Çetin, M., Karabay, M. E., & Efe, M. N. (2012). The Effects of Leadership Styles and the Communication Competency of Bank Managers on the Employee's Job Satisfaction: The Case of Turkish Banks. *Procedia - Social and Behavioral Sciences*, 58(1), 227-235.
- Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L., & Cheng, B. S. (2014). Affective Trust in Chinese Leaders: Linking Paternalistic Leadership to Employee Performance. *Journal of Management*, 40(3), 796-819.
- Coleman, M. (2007). Gender and educational leadership in England: A comparison of secondary headteachers' views over time. In *School Leadership and Management*, 27(4), 383-399.
- Cullen, C. B., & Gordon, P. A. (2014). The Relationship between Leadership and Communication Skills of Nurse Managers and the Organizational Citizenship Behaviors of Medical-Surgical Nurses and Nursing Assistants. *Management and Organizational Studies*, 1(2), 23-29.
- Davies, P. G., Steele, C. M., & Spencer, S. J. (2005). Clearing the air: Identity safety moderates

- the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology*, 88(2), 276-287.
- Dunn, D., Gerlach, J., & Hyle, A. (2014). Gender and leadership: Reflections of women in higher education administration. *International Journal of Leadership and Change*, 2(1), 10-18.
- Eagly, A. H., & Johannesen-Schmidt, M. C. (2001). The leadership styles of women and men. *Journal of Social Issues*, 57(4) 781-797.
- Eagly, Alice H. (2005). Achieving relational authenticity in leadership: Does gender matter? *Leadership Quarterly*, 16(3), 459-474.
- Eagly, Alice H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. In *Psychology of Women Quarterly*, 31(1), 1-12
- Eagly, Alice H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *Leadership Quarterly*, 14(6), 807-834.
- Ferdinand, A. (2006). Metode Penelitian Manajemen Pedoman Penelitian untuk Penulisan Skripsi Tesis dan disertai Ilmu Manajemen. In *Semarang: Universitas Diponegoro*.
- Flauto, F. J. (1999). Walking the talk: The relationship between leadership and communication competence. *Journal of Leadership and Organizational Studies*, 6(1), 86-97.
- Fritz, C., & van Knippenberg, D. (2017). Gender and leadership aspiration: the impact of organizational identification. *Leadership and Organization Development Journal*, 38(8), 1018-1037.
- Ghozali, I. (2017). Model Persamaan Struktural. Konsep dan Aplikasi Dengan Program AMOS 24.0. Update Bayesian SEM. In *Model Persamaan Struktural. Konsep dan Aplikasi Dengan Program AMOS 24. Update Bayesian SEM*.
- Hair, E., Halle, T., Terry-Humen, E., Lavelle, B., & Calkins, J. (2006). Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21(4), 431-454.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis: A Global Perspective. In *Multivariate Data Analysis: A Global Perspective*.
- Hayes, A. F. (2017). Methodology in the social sciences : Introduction to mediation, moderation, and conditional process analysis. In *A regression-based approach*.
- Herring, S. C. (2008). Language and the Internet. *The international encyclopedia of communication*.
- Hoogendoorn, S., Oosterbeek, H., & Van Praag, M. (2013). The impact of gender diversity on the performance of business teams: Evidence from a field experiment. *Management Science*.
- Hussein, N., Omar, S., Noordin, F., & Ishak, N. A. (2016). Learning organization culture, organizational performance and organizational innovativeness in a public institution of higher education in Malaysia: A preliminary study. *Procedia Economics and Finance*, 37, 512-519.
- Jalilzadeh, D., & Pouya, M. R. K. (2016). Evaluation the effect of corporate governance on risk management in accepted companies in Tehran Stock Exchange. *International Business Management*, 10(17), 4050-4058.
- Kerlinger, F., & Lee, H. (2000). Multiple Regression Analysis: Foundations. In *Foundations of behavioral research*.
- Khan, W. A., & Vieito, J. P. (2013). CEO gender and firm performance. *Journal of Economics and Business*, 67, 55-66.
- Kirchner, G. L. (1993). Gender as a moderator variable in predicting success in a master of arts in teaching program. *Educational and Psychological Measurement*, 53(1), 155-157.

- Klenke, K. (2007). Authentic Leadership: A Self, Leader, and Spiritual Identity Perspective. *International Journal of Leadership Studies*, 3(1), 68-97.
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, 137(4), 616-642.
- Koning, L. F., & Van Kleef, G. A. (2015). How leaders' emotional displays shape followers' organizational citizenship behavior. *Leadership Quarterly*, 26(4), 489-501.
- Kovjanic, S., Schuh, S. C., Jonas, K., Quaquebeke, N. Van, & Van Dick, R. (2012). How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees' needs as mediating links. *Journal of Organizational Behavior*, 8(2012), 1031-1052.
- Leman, P., & Tenenbaum, H. (2013). *Gender and development*. Psychology Press.
- Luo, W., Song, L. J., Gebert, D. R., Zhang, K., & Feng, Y. (2016). How does leader communication style promote employees' commitment at times of change? *Journal of Organizational Change Management*, 29(2), 242-262.
- Luthans, F., & Avolio, B. J. (2009). The "Point" of positive organizational behavior. *Journal of Organizational Behavior*, 30(2), 291-307.
- Madlock, P. E. (2008). The link between leadership style, communicator competence, and employee satisfaction. *Journal of Business Communication*, 45(1), 61-78.
- Misra, S., & Srivastava, K. B. (2018). Team-building competencies, personal effectiveness and job satisfaction: The mediating effect of transformational leadership and technology. *Management and Labour Studies*, 43(1-2), 109-122.
- Morkevičiūtė, M., & Endriulaitienė, A. (2020). Explaining work motivation through perceived transformational leadership: what to expect in a sample of female employees? *Gender in Management*, 35(6), 585-599.
- Ngoc Khuong, M., & Huu An, N. (2016). The Factors Affecting Entrepreneurial Intention of the Students of Vietnam National University — A Mediation Analysis of Perception toward Entrepreneurship. *Journal of Economics, Business and Management*, 4(2), 104-111.
- Nunnally, J. . (1978). Psychometric Theory(2nd ed). In *Journal of Chemical Information and Modeling*.
- Ogunfowora, B. (2014). The impact of ethical leadership within the recruitment context: The roles of organizational reputation, applicant personality, and value congruence. *Leadership Quarterly*, 25(3), 528-543.
- Patterson, P. (2016). Retrospective: tracking the impact of communications effectiveness on client satisfaction, trust and loyalty in professional services. *Journal of Services Marketing*, 30(5), 485-489.
- Perbawaningsih, Y. (2013). Plus Minus of ICT Usage in Higher Education Students. *Procedia - Social and Behavioral Sciences*, 103(2013), 717-724.
- Porch, C. (2018). Transformational Leadership in Principals and Teachers' Psychological Need Satisfaction and Motivation: A Qualitative Study. In *ProQuest Dissertations and Theses*, 48(1), 106-132.
- Prabhu, D., & Hegde, S. (2012). Design and Implementation of Performance Management Systems, KPIs and Responsibility Centers: A Case Study. *South Asian Journal of Management*, 19(2), 121-133.
- Preacher, K. J., & Leonardelli, G. J. (2001). Calculation for the Sobel test. Retrieved September.
- Range, B., Hewitt, P., & Young, S. (2014). Principals' Perceived Supervisory Behaviors

- Regarding Marginal Teachers in Two States. *Administrative Issues Journal: Education, Practice, and Research*, 4(1), 1-12.
- Razi, M. J. M., Abdul Karim, N. S., & Mohamed, N. (2014). Gender Difference Effects on Contributing Factors of Intention to Be Involved In Knowledge Creation and Sharing. *Asian Economic and Financial Review*, 4(7), 893-907.
- Reicher, S., Haslam, S. A., & Hopkins, N. (2005). Social identity and the dynamics of leadership: Leaders and followers as collaborative agents in the transformation of social reality. *Leadership Quarterly*, 16(4), 547-568.
- Rost, J. C., & Barker, R. A. (2000). Leadership Education in Colleges: Toward a 21st Century Paradigm. *Journal of Leadership Studies*, 7(1), 3-12.
- Shahbaz, M., Gao, C., Zhai, L. L., Shahzad, F., & Hu, Y. (2019). Investigating the adoption of big data analytics in healthcare: the moderating role of resistance to change. *Journal of Big Data*, 6(6), 1-20.
- Shumate, B. (2016). Correlations Between Gender-Based Transformational Leadership and Project Manager Competencies. In *ProQuest Dissertations and Theses*.
- Sobel, M. E. (1987). Direct and Indirect Effects in Linear Structural Equation Models. *Sociological Methods & Research*, 16(1), 155-176.
- Solimun, & Fernandes, A. A. R. (2017). Investigation the mediating variable: What is necessary? (case study in management research). *International Journal of Law and Management*, 59(6), 1059-1067.
- Stefanovic, N., & Barjaktarovic, L. (2020). Gender makes the difference: the moderating role of gender on the relationship between management structure and performance in banking. *Gender in Management*, 36(1), 18-38.
- Steffens, N. K., Haslam, S. A., Reicher, S. D., Platow, M. J., Fransen, K., Yang, J., Ryan, M. K., Jetten, J., Peters, K., & Boen, F. (2014). Leadership as social identity management: Introducing the Identity Leadership Inventory (ILI) to assess and validate a four-dimensional model. *Leadership Quarterly*, 25(5), 1001-1024.
- Thomas, S. N. (2010). An investigation of the administrator's role as instructional leader in effective computer technology integration. In *ProQuest Dissertations and Theses*.
- Thompson, B. (2017). Women: Management and Leadership. In *Palgrave Studies in Gender and Education*.
- Vadeveloo, T., Ngah, N. S., & Jusoff, K. (2009). The Effectiveness of Leadership Behavior Among Academician of Universiti Teknologi MARA Terengganu. *Management Science and Engineering*, 3(3), 1-8.
- Vasset, F., Marnburg, E., & Furunes, T. (2011). The effects of performance appraisal in the Norwegian municipal health services: a case study. *Human resources for health*, 9(1), 1-12.
- Wei, F., Yuan, X., & Di, Y. (2010). Effects of transactional leadership, psychological empowerment and empowerment climate on creative performance of subordinates: A cross-level study. *Frontiers of Business Research in China*, 4(1), 29-46.
- Wang, Z., Liu, Y., & Liu, S. (2019). Authoritarian leadership and task performance: the effects of leader-member exchange and dependence on leader. *Frontiers of Business Research in China*, 13(1), 1-15.
- Zhang, S., Ke, X., Frank Wang, X. H., & Liu, J. (2018). Empowering leadership and employee creativity: A dual-mechanism perspective. *Journal of Occupational and Organizational Psychology*, 91(4), 896-917.