Women School Leadership: The Catalytic Style in Developing Guidance and School Members' Well-Being in Facing Global Pandemic

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Abstract
This article investigates how women principals practise their leadership to address the global pandemic challenges encountered by the Islamic-based junior high schools or *Madrasah Tsanawiyah* (MTs). The study examines the key behaviours and practices school leaders implement to address the global pandemic challenges. Some challenges in the global pandemic, including learning management, developing an online curriculum, school facilities, and teacher performance, were indicated to hinder the learning effectiveness in MTs. The madrasah principals, the top-level leaders in the institutions, play a critical role in addressing these issues. This research utilized a multiple case study approach and collected qualitative data from six MTs in Bogor, Tangerang and Bekasi. An in-depth interview with 18 participants was conducted to investigate principal leadership practices. The findings revealed that principals displayed a catalytic leadership approach through an agent of change where school members and stakeholders are invited to change the curriculum system and performance to respond to the challenges in the global pandemic. The results of this study also indicate that most female principals prioritize the well-being of teachers and students in facing learning challenges in the pandemic era.

INTRODUCTION

In the Indonesian context, the participation of women leaders is still low in many public sectors, including Education (Dzuhayatin & Edwards, 2010). According to Dzuhayatin and Edwards (2010), women principals lacked participation in the leading process of madrasah. This may cause by a lack of days in the educational activities. Cahyati et al. (2021) echoed that women in Indonesia still face challenges to gaining leadership positions and growing acknowledgement of gender equality in an institution. However, Tjilen (2019) argued that women's leadership style in the field of education can realize effective leadership because women have the advantage of playing and creating organizational effectiveness.

Women's leadership builds consensus and good relationship through communication; involvement has transformed leadership and is a better negotiator than men. A woman as a leader in the field of education is possible to create an educational institution that excels because work related to education and attention and affection for children and adolescents is a tendency of women in general (Tjilen, 2019).

The covid-19 outbreak was dramatically rising around the world in 2020. The outbreak influenced policy and practice change in many sectors, including religion, economy, social, and Education (Daniel, 2020). Somehow, religious activities tend to change regarding the pandemic situation. The Indonesian Ulama Council recommend the limitation of many

required and sunnah (optional) religious activities, such as Friday, *'Īd al-Fitr*, or *'Īd al-Aḍḥā* prayers, are not performed in the crowd (*jamā'at*) as normally (Sholeh, 2020; Sofwan Jauhari & Ghoni, 2020).

In the education system, the learning system changes rapidly to adjust to the current conditions and keep students learning (Kultsum, 2021). *Pembelajaran Jarak Jauh* (PJJ/Distance learning), also known as online learning, was the only choice of every school and madrasah in transforming lessons for students. The development of the internet and technology made PJJ much easier to support learning activities. Therefore, teachers and students need technology and internet access to carry out these activities. However, challenges are found where not all schools, teachers, and students can facilitate online learning.

This situation becomes a distinctive challenge for school leaders due to adjusting the problem and maintaining the schools' quality of teaching and learning. The first challenge might relate to the school curriculum, where online learning could influence the target lesson. The second challenge may relate to school facilitation, which forces school management and teachers to upgrade their teaching strategy from offline to online (Kultsum, 2021). Practical leadership skills will enable the identification and implementation of solutions to address teaching and learning challenges in the global pandemic in MTs. For instance, a principal could explore new learning models and share and discuss this with general information about the Covid-19 outbreak (Remuzzi & Remuzzi, 2020).

Key Characteristics of Women leadership in school in the Indonesian context

Most of the research on women in leadership has been conducted in developed countries, and there is a need for more research in developing countries (Maheshwari & Nayak, 2022; Oplatka, 2006). Indonesia is a developing country in South East Asia. The insights from this study can benefit scholars from developing and developed countries in offering a perspective on current female leadership in a specific cultural context (C & A, 2005; Wijaya Mulya & Sakhiyya, 2021), especially in handling the global pandemic in *madrasahs*. Issues specific to developing countries that have not been discovered in developed country studies can help inform better policymaking and laws on gender equality (Triana & Karmilah, 2019). In addition, successful stories of female academic leaders in Indonesia can provide motivation and role models for other aspiring women in developing countries.

In those research, generally, there is no significant gender difference in terms of leader in an organization (Tjilen, 2019). However, it is more associated with the leadership style that tends to each leader's personality characteristics. Therefore, women have an opportunity to be a leader in most organizations, including education services. The cultural construct of Indonesia influences the idea that different gender affects the perception of leadership. The leadership style is the different outcomes that affect the performance of an organization, so gender leadership style influences the organization (Madden, 2011; Patel & Buiting, 2019).

According to Dhaniarti & Harmanto (2018), women's leadership characteristics include 1) emotional, 2) cooperative, 3) intuitive, 4) tactful, 5) emphatic, and 6) submissive. Likewise, men's leadership characteristics are as follows; 1) aggression, 2) independence, 3) objective, 4) analytical thought, 5) confidence and 6) assertiveness. Therefore, Tjilen (2019) argued women's leadership are divided categories; feminism-masculine leadership and transactional and transformational leadership. The feminine-masculine category was applied based on gender identity and character. Each leader may combine the two categories without identifying the gender identity of the leader.

Some education studies on transformational leadership indicate that it is effective for school management and organizational culture. Leithwood & Jantzi (2013) examined the

impact of transformational leadership on organizational conditions and student engagement. The quantitative study with school principals and students made at least two interpretations. First, the study found that transformational leadership practice positively affected organizational conditions. The practice widened the potential for a leader to develop the variation concept of leading the organization. Second, transformational leadership had less impact on student engagement. Leithwood & Jantzi (2013) concluded that transformational leadership practice was significant in organizational conditions but not student engagement. They believed that family educational culture was a more substantial influence than education in school. Allen et al. (2015) found that transformational leadership significantly influences the school climate. The five transformational leadership factors were examined: idealized attributes, idealized behaviour, inspirational motivation, intellectual stimulation, and individualized consideration. These factors significantly contribute to creating an effective school climate, which leads to the learning success of students.

Catalytic Leadership

Catalytic leadership was introduced by Luke & Luke (1997). They stressed four tasks of leaders in addressing the problems: (1) focusing on and paying attention to the specific problem so that it can be adequately solved; (2) selecting capable people who have an interest in dealing with the problem; (3) creating strategies and options to address the issue; and (4) applying and maintaining the strategies through appropriate interaction and interconnection with members of the institution, and through sharing and giving feedback to each other.

For instance, a study based on a needs analysis conducted by Morse et al. (2010) indicated that catalytic leadership was appropriate in developing extension education in Iowa. In this case, the issue was how extension educators adopt and adapt a catalytic leadership practice to communicate with staff in an institution involved in developing extension education. All four of Luke & Luke's (1997) approaches were adopted in the research. Firstly, the extension program administration discussed the importance of catalytic leadership roles for leaders to develop communication with their staff. Secondly, the state organization reviewed and rewrote the job description for the program leader to encourage the notion of leadership. In other words, the organization encouraged hiring staff with the skills needed for catalytic leadership. Thirdly, training was provided to develop the catalytic leadership skills of the staff. Fourthly, the program was maintained by providing an incentive for staff to participate in community initiatives that use catalytic leadership.

Catalytic leadership derives leaders as change agents. A predominant role of catalytic leaders is to develop stakeholder capacity to identify and solve problems and build trust to enable stakeholders to work collaboratively to reach their goals (Clark, 2012; Luke & Luke, 1997; Williams & Sullivan, 2011). Further, some scholars define catalytic leadership as collaborative leadership in educational leadership (Ansell & Gash, 2018; Hallinger & Heck, 2014; Jawas, 2014). Ansell & Gash (2018) note that a catalytic leader is a leader who identifies value-creating opportunities and mobilizes stakeholders for effective and productive collaboration. The catalytic role builds opportunity through negotiation and mediation to pursue more significant accomplishments.

Some scholars define catalytic leadership as part of collaborative leadership in educational leadership (Ansell & Gash, 2018; Hallinger & Heck, 2014; Jawas, 2014). Ansell & Gash (2018) note that a catalytic leader is a leader who identifies value-creating opportunities and mobilizes stakeholders for effective and productive collaboration. The catalytic role tends to build opportunity through negotiation and mediation to pursue more significant accomplishments

In the school leadership context, Hallinger & Heck (2014) and Jawas (2014) describe the leader as a change agent for school improvement and educational reform to develop

student learning achievement. Jawas (2014) identifies the school principal as a link in developing the work quality of individuals, teams, and organizations. However, Hallinger & Heck (2014) indicate the contribution of leadership as an agent in producing school improvements depends on the nature of the leadership and its impact and the historical and current condition of the school. The leader's contribution involves academic structures, school norms, and ongoing organizational processes such as participating in decision-making.

In the Indonesian school context, being a change agent is supposed to be the desire of a School principal when developing a school (Juharyanto, 2017). Other characteristics are essential for principals to adopt, such as cultural awareness, communication skills, and creativity. A leader should reflect cultural awareness when making policies in a school. The policy is made according to the culture of the members and the organization.

Creativity is important for principals who act as change agent leaders. Creative leaders will always have the ability to invest and dare to take risks in solving organizational challenges (Juharyanto, 2017). Such a leader must display creativity and innovation in leading the school to meet its goals. In the process of capacity building, the School Principal draws on the efforts of the members, including teachers and staff, as well as invites stakeholders to be partners in the school's development. To facilitate this action, entrepreneurship skills are necessary for the leader to be able to gain and maintain the trust of stakeholders so that they might continue to provide support for the institution's development (Morse, 2010).

To sum up, catalytic leadership tends to be the development framework for addressing problems. Leaders invite appropriate group members to work on dealing with the issue, creating multiple strategies and options for action, implementing the strategy and maintaining the working group. However, the studies above present a limited understanding of school principals developing a process to address school issues, create policy and action, and implement excellent communication among school members. Therefore, it is necessary to examine how leaders, especially women leaders, take a role as a change agents in the MTs context and how their management creativity can achieve the organization's purpose. There is also a need to investigate the MTs leaders' understanding of cultures, values, and norms to connect the members of the group or society in addressing the challenges of the *madrasahs*. The investigation is necessary to see how women leaders' efforts to improve their communication approaches relate to teachers, staff, and stakeholders.

Rational of current Study

In the Indonesian context, the participation of women leaders is still low in many public sectors, including Education (Dzuhayatin & Edwards, 2010). According to Dzuhayatin & Edwards (2010), women principals were noted to lack participation in the leading process in the madrasah. This may cause by a lack of days in the educational activities. Cahyati et al. (2021) echoed that women in Indonesia still face challenges to gaining leadership positions and growing acknowledgement of gender equality in an institution. However, Tjilen (2019) argue that women's leadership style in the field of education can realize effective leadership because women have the advantage of playing and creating organizational effectiveness.

Objectives

The current study focuses on Indonesian principals' leadership practices in MTs to address global pandemic challenges and enhance school performance during online learning. Major findings reveal catalytic leadership where women leadership in MTs is the agent of change in some sectors, including curriculum, madrasah facilitation, and students' well-being. This paper aims to provide an in-depth analysis of Indonesian women principals' catalytic leadership in MTs from the perspectives of principals and teachers.

METHODS

Data Collection

In this research, a qualitative method with a multiple case study approach will be used in the study. Baxter & Jack (2015) stated that multiple case studies arise to understand the cases' similarities and differences. The multiple case study can be considered other than predicting similar results (a literal replication) or constructing results for predictable reasons (a theoretical repetition). Therefore, evidence is more substantial and reliable in a multiple-case study approach than in a single-case study. Thus, the researcher will have more scope to clarify the research findings (Gustafsson, 2017).

This research utilized a multiple case study approach and collected qualitative data from six Indonesian MTs (public and private) in Bogor, Tangerang, and Bekasi (Botabek). In-depth interviews were conducted to investigate the women principals' leadership in facing teaching and learning challenges during the global pandemic.

Research Setting and Participants

Purposive sampling strategies were utilized in this study. Table 1 shows the criteria for selecting the six MTs, including public/private *madrasahs*.

Table 1. Demographical information of MTs

Region	Madrasah Category	Accreditation
Bogor	SBG1	A
	PBG2	A
Tangerang	STG3	A
	PTG4	A
Bekasi	SBK5	A
	PBK6	A

Note: SBG1=State MTs in Bogor; PBG2=Private MTs in Bogor; STG3=State MTs in Tangerang; PTG4=Private MTs in Tangerang; SBK5=State MTs in Bekasi; PBK6=Private MTs in Bekasi.

The women principal, deputy, and teacher from each school were invited to participate in this study. The participants comprised six women principals, six deputy principals covering student deputies, and six teachers. So, there are 18 participants in total. The researchers interviewed the participants to record their perception of women's leadership practice, school management, and teacher performance in MTs during the pandemic.

The data were collected within two months. The first was spent in two *madrasahs* in Bogor and Tangerang, and another month in a madrasah in Bekasi. The communication and discussion about the purpose of the research, time of school and classroom observation, and interviews with all participants were organized before the fieldwork. A pilot study was conducted to measure the validity and reliability of interview questions. The researchers did some revisions if necessary.

In the next step, researchers obtained the agreement of each madrasah before starting the observations and interviews. There were two ways of connecting with the institutions. First, the researchers formally communicated with the institution by sending an information sheet, interview guide and consent form. Second, the research team personally contacted the principals or teachers and formally approached the institution once the participant agreed to be interviewed. After the participants agreed, the researcher and participants discussed the schedule. The researchers visited and met each of the participants in each madrasah. They spent two days in one case study school.

Data coding and analysis

To analyze the data, the researchers applied thematic analysis to identify two research focuses: women's leadership competencies and leadership styles at MTs during the pandemic. The researcher must identify and cluster the dataset based on the key categories (Attride-Stirling, 2001). More specifically, the researcher will determine and analyze the themes in the dataset to answer the research questions.

All interviews were conducted in Indonesian, and the recorded interviews were transcribed verbatim (Creswel, 2014). We used a colouring-code strategy to categorize the data based on research themes, and this process was inspired by. In a slight deviation from Stuckey's (2015) method, which used coloured markers to highlight the data coding, we used computer texts highlighting features and saved the data in a computer file.

RESULTS AND DISCUSSIONS
Results
Madrasah challenges during the Covid-19 pandemic

Based on the interview, some MTs met some problems in the teaching and learning process of applied distance learning. MTs face three issues in Botabek. The following figures describe the three challenges of MTs in applying online learning during the covid-19 pandemic.

Table 2. Madrasah challenges in applying online learning during the pandemic

Challenges	Schools
Infrastructure	PBK6
	PTG4
	PBG2
Digital Literacy	SBG1
	PBG2
	STG3
	PTG4
	SBK5
	PBK6
Catalytic Leadership	SBG1
	PBG2
	PTG4
	SBK5
	PBK6

Note: SBG1=State MTs in Bogor; PBG2=Private MTs in Bogor; STG3=State MTs in Tangerang; PTG4=Private MTs in Tangerang; SBK5=State MTs in Bekasi; PBK6=Private MTs in Bekasi.

The table describes three challenges in applying online learning during the pandemic in MTs in Botabek, including infrastructure and digital literacy. The following discussion will discuss the issues in detail.

Infrastructure

Obtaining online learning during the covid-19 pandemic is one way to deliver online learning. However, not all schools and *madrasahs* have a support system to applicate the learning. In this current study, most MTs, such as PBK6, PTG4, and PBG2, complained that they did not have enough facilitation to support online learning. At least three elements concerned the school accommodating online education, including budgeting, disadvantaged family, and geographies.

The first element is financial. According to the Principal of PBK6 school, the budget is never met to upgrade internet Wi-Fi, which is the most significant facilitation of online learning.

> We do not prepare any budget to support teachers on online learning. We do not have enough funding. Therefore, we cannot upgrade the internet Wi-Fi to facilitate teachers delivering online lessons at school. P-PBK6

For PTG4 Principal, online learning is another challenge for the school to accommodate teachers and students in learning. According to her, the school needs to expense extra finance to facilitate teachers' teaching. The School Principal tried to manage the budget to install the internet so that teachers who could not afford mobile data could still teach at school. However, the budget is still far smaller to cover the teachers' need to use the internet.

> I have installed the internet with 20mbps so that teacher can teach here (at the madrasah). However, the signal does not look quite strong when most teachers use it. P-PTG4.

According to a teacher in PBG2, financial support is necessary to facilitate teachers and staff in buying mobile data. Most teachers in PBG2 preferred to teach from home. Therefore, they need schools to add more expenses to purchase mobile data.

> Since we teach students from home, the school does not provide transportation money. We still need to buy mobile data to maintain the teaching process with students. We cannot upload and download materials through chat applications when the data is insufficient. T-PBG2.

From the statements above, it can be concluded that some madrasahs did not have a sufficient budget to support online learning. Educational policy has been decentralized since 2001 (Muhajir, 2016). This has deprived *madrasahs* of the authority of managing their schools. The positive impact of this policy is *madrasahs* can instigate change to improve their institutions based on the local cultural needs. However, this autonomy might challenge *madrasahs* to boost their quality to compete with other *madrasahs* or mainstream schools. In this current study, online learning forces madrasahs to re-manage their budgeting plan to fulfil the digital-based learning facilitation. They need to dig, allocate, prioritize, manage and take responsibility for their empowerment (Mulyasa, 2006).

Consequently, the decentralization system influences the school's financial management during this pandemic. A school with well-managed and good sources of finance will face the little challenge of administering the institution's budget. However, schools with a small budget and low income may struggle to manage their financial problems. Although the central government has allocated funding to support both public and private *madrasahs*, some schools relocate the funding for teachers' salaries and pay monthly bills like electricity and water bills.

The second element is the disadvantaged family, which became a significant challenge for most MTs in this current study. As mentioned before, this study was conducted in three settings: Bogor, Tangerang, and Bekasi (Botabek). The settings are categorized as suburban areas near the capital city of Jakarta. Botabek is a corridor connection for the capital city, Jakarta. However, the cities have different statuses. Tangerang and Bogor are designated

second metropolitan cities after Jakarta. Some prestigious businesses, such as mega-mall and luxury residences, are built in the city (Spreitzhofer, 2005). It influences many factors of living styles, including education and culture. Most of the citizens in Tangerang enjoy good living facilities, education, and information access (Winarso, 2006). Consequently, it creates a more civilized local community (Spreitzhofer, 2005; Winarso, 2006).

Online learning needs highly digital facilitation in order to support its process. However, this becomes a problem when some teachers and students cannot afford digital tools such as cell phones, tablets, computers, or laptops. The study found some MTs filled by many disadvantaged students. Many students come from low economic and social conditions where they can only afford to earn daily needs. As a result, some parents face difficulties buying mobile data for their children. This mainly happened in MTs in Bekasi. The study found that most parents work as farmers and factory workers. SBK5 deputy student affairs principal states parents provide cell phones for their children. Still, some of the devices were not compatible with zoom meetings or downloading materials from the teachers. Moreover, they only can afford to buy limited data, so they cannot upload or download the task from the teachers.

> Most of the students have cell phones. However, it is hard for them (students) to access the learning materials since they have fewer updated mobile phones or lack mobile data. DP-SBK5

In the case of PBK6, most parents work in factories requiring them to bring mobile phones as a communication medium. Therefore, when parents go to work, their kids will not have learning devices. A teacher mentioned that most students did not join when they started online learning through the WhatsApp group. The teacher then found that the parents had the phones to leave the children at home without any devices.

> I called some students to ask why they did not join my meeting. But then, I got only their parents, who answered and told me they had brought the phone to the factory. Then we end up only giving some tasks to those students T-PBK6

This is echoed by research conducted by Putri et al. (2020). Their study found that a lack of digital support prevents students' learning process activity. In fact, the limited mobile data hindered learners from following the learning update from the teacher. Further, the lack of mobile data also decreases communication and interaction among teachers, students, and parents due to controlling students' learning progress (Putri et al., 2020).

Another case in the MTs PTG4 and SBG1 found that some students have siblings that need to share their mobile phones in online learning. The deputy principal mentioned that some students had limited time to learn since they had shared their devices with their siblings.

> We accept some sibling students in this school. Since online learning, they seem to struggle to get enough access to use due to sharing their devices during learning. DP-PTG4

> …Some students with a brother or sister need more time to submit their tasks because they need to take turns using the device with their siblings. T-SBG1

This limitation, such as the lack of mobile data and sharing devices, results from less income from most students' families. A study found that 54.4% of participants stated that online learning significantly increases family expenses, especially for internet and mobile data costs (Lase et al., 2021). Therefore, this problem needs to be solved to support online learning. Some school budgets provided by the government, like *Biaya Opersional Sekolah* (BOS) might be allocated to help parents and teachers buy internet data.

Geographical condition is the third element that hindered students and teachers from accessing the internet to deliver digital-based learning and teaching in MTs. In this current study, PBG2 and PTG4 complained that students and teachers face difficulty accessing the internet because of the condition of their area. A teacher in PBG2 stressed that although she had enough data, the network used to be in trouble, which slowed her interaction with the students.

> …I realize that the internet network in our area often experiences problems. Even though we have sufficient mobile data, sometimes we find it difficult to access the internet when we give students lessons. T-PBG2

This is in line with a study in India that geographical conditions have become one of the online learning process problems. The study mentioned that the geographical scope is limited to the National Capital Region of Delhi, which has better smartphone penetration and internet access than other states in India. Regarding this current study, the area that can access the internet is not evenly distributed. Even though it is in an urban area, the network conditions are still limited. Another thing that affects the internet network's limitations is the area's extreme climate. These two things can affect the smooth process of internet penetration in online learning.

Digital Literacy

The interaction of technology is not a new thing in Indonesian society. The study noted that the penetration of technology use occurs mainly among students and young people. However, the use of new technology is limited to entertainment needs (Nugraha et al., 2021). Thus, not all people are accustomed to using digital platforms in learning and teaching. This limitation is also a challenge for teachers and students undergoing the distance learning process. Online learning facilities should greatly assist learning and teaching in this pandemic era. But unfortunately, some teachers, students, and parents, especially in remote areas, still have difficulty operating these learning facilities.

This current study found that digital literacy is one of the challenges in the online learning process. The results of interviews with school principals found that many teachers still are not ready and trained to use technology tools in teaching.

> It's no secret, and we have to admit that many of our teachers, especially seniors, are not ready for online learning. In fact, I found that many of them still have difficulty operating zoom meetings or group calls when they want to teach. P-SBK5

The PBG2 schools also face the same challenges where some teachers still have difficulty designing lessons and operating online learning materials such as uploading and downloading materials.

Although the numbers are not many, we still find some teachers who
need help operating a laptop to design digital-based learning. DP-
PBG2

However, this study also found that many MTs teachers were already fluent in operating
technology in online teaching. They even understood the IT-based curriculum a long time
before the pandemic hit. The lack of adequate facilities and funds hinders them from carrying
out the distance learning process. As a result, this prevents the smooth operation of online
learning. Based on the interview with SBG1 and STG3 teachers, it was found that they
understood the IT-based curriculum very well. However, they have difficulties applying
technology because of the lack of school facilities.

For your information (researchers), we have conducted many training
and discussions related to the IT-based curriculum. However, we are
still very limited in its application because we have not met the needs
of a language lab. After all, I teach English or other digital equipment
to support the program. T-SBG1

Several teachers at PTG3 experienced the same problem. Those who have received
training in the use of IT have had to face the fact that their school does not yet have adequate
technological facilities.

…We don't have projectors in every school yet. The school has only
one, and we have to take turns using it. Not to mention the limitations
of our device such as computers or laptops, this, of course, limits us,
the teachers, from teaching students using technology.

This is in line with a study that mentioned teachers and students use face-to-face
teaching and learning. It limits them from developing their digital literacy and, in the end,
becomes a barrier in the online learning process. Some teachers can still not design online
learning materials to build student achievement. The lack of interaction between the two
makes it difficult for teachers and students to achieve learning targets. Thus, schools and the
government's roles are very significant in providing training that can encourage the
advancement of digital knowledge of teachers because students are still very dependent on
teacher guidance in learning (Syaharuddin et al., 2021).

Parents and students also experience limited digital literacy. The pandemic hit changed
the online learning system, providing challenges for students and parents in operating
technology for learning. This study found that some teachers mentioned that students and
parents face difficulties utilizing technology and engaging the online interaction with the
teachers. For instance, in the case of SBG1, some students were found never to join the zoom
meeting and submit their tasks in the google form. Some teachers and principals investigated
and found that both parents and students did not know how to operate such a meeting and
upload the task online. As a result, the madrasah has given them the right to come to school to
learn and submit their assignment.

...After we investigated, it turned out that parents and students did not
understand how to operate zoom meetings and google forms. The
following week we asked students to come to school and give a brief
training on how to operate online learning, and at that time, we
allowed them to submit their assignments manually (offline). P-SBG1

In conclusion, the findings of this study indicate that the lack of digital literacy for teachers and students is still a challenge in implementing online learning. The internal and external factors also affect the technology utility process in learning.

Discussions
Catalytic leadership in focusing members' well-being and guidance

It is stated that core self-evaluation (CSE) plays an important role in mindfulness, where people develop others' well-being (Saleem et al., 2022). Further, some scholars agree that CSE covers different aspects of well-being, including life fulfilment, happiness, psychological healthiness, and emotional appearance (Özer et al., 2016; Yan et al., 2013).

In this study, the catalytic type of leader is seen as an agent of change. The head of MTs intends to bring the madrasahs he leads to meet educational needs. Changes in the education system resulting from the pandemic "force" school principals to think creatively. One of them is to provide opportunities for educators to develop their knowledge of making technology-based curricula.

Regarding financial management, the women's catalytic model focused on transparency. Transparency was the most crucial aspect of financial management. Emerging and developed *madrasahs* realized that openness in managing finances was a mandate given by the state, Foundation, and parents. For these schools, the funds they had received as rights were paired with obligations that must be accounted for. Madrasah leaders and members were directly involved in controlling these funds' expenditures to avoid fraud inside the school. According to the Principal of SBG1, financial transparency acted to prevent any misunderstandings that could appear among members of the school:

> If the financial statements come from the head of administration and financial affairs, he must provide a signature proof that he knows it. I will not sign it before him. Transparency is essential to avoid misunderstandings between us (leaders and subordinates). I told all members must know and be aware of the financial activities at school. P-SBG1

The transparency of the financial system implemented at PBG2 avoided potential problems between foundations, principals, and madrasah staff:

> Our finances have no problem because the financial system has been arranged in such a way. The Foundation, the head of the madrasa, and the staff are open to each other regarding using these funds. P-PBG2

The SBK5 Principal believed that transparency in an organization would develop the stability of school finances:

> The development of a school, like an infrastructure, facilities, and teacher performance, comes from stable institutional finance. This is what will determine the development of the school's performance. Let me tell you a story: they found it challenging to find our mistakes (budget fraud) …There should not be any rupiah that may disappear. This is the mandate of the country! Therefore, I always emphasize to my subordinates the matter of transparency because this is very important. P-SBK5

This research project also suggests catalytic women leadership represents a leader functioning as an intermediary and buffer in the Indonesian context. As an intermediary, the principal acts as a link between teachers and stakeholders to reach an agreement. In this case, the school principal functioned as a mediator or a communication bridge between the members to achieve the school's goals. A principal acting as a buffer was another leader's function in MTs in Indonesia. This meant that a principal was a barrier by moderating any comments and opinions produced by two parties (such as teachers and the schools' Foundation) when in conflict. Besides having the four catalytic leadership abilities described by Luke & Luke (1997), the principals in Indonesia also acted as mediators and buffers. These features are further discussed below.

Challenging leadership was found in two *madrasahs*, PTG4 and PBK6. Some factors influenced this phenomenon. The low visibility of the Principal in PTG4 created weak communication and coordination between the school principal, deputy principals, and teachers. The school's Foundation's deep intervention curtailed the madrasah principal's performance in PBK6. However, these principals were still willing to perform their roles in leading the *madrasahs*. An analysis of the leadership performance of the two principals found that they demonstrated a catalytic leadership approach. This study's findings revealed that the principals of PTG4 and SBK6 made efforts to create opportunities to share the school's vision and achieve its values by inviting stakeholders such as teachers, foundations, parents, and the government to participate in the madrasah's development.

Catalytic leadership was also evident in SBK6, an MTs in Bekasi. Based on interviews and observations, the researchers found that the principal and deputy principals took a mediatory role and sought to change the current situation in the madrasah. For example, the school principal noticed a gap between madrasah members and the Foundation, which created miscommunication and misunderstanding. In dealing with this situation, he preferred to take the role of mediator and buffer to mediate the needs of the two parties. He stated that being a catalyst for both parties was the best choice as he could see any problem objectively, making it easy for the school principal to find a solution. A neutral position also demonstrated that the school principal did not receive partial to one party or another. This would make it easier for the school principal to determine an appropriate solution. He realized that any decision should meet the needs of the two parties:

> I admit that the Foundation cannot realize some of the aspirations of teachers, and it indeed creates a gap between them. For example, some teachers request the Foundation to increase their salary and require transparency from the Foundation. To bring out this issue, I acted as a mediator among them, tried to be neutral, and did not take sides with each other. I listened to their aspirations and conveyed them to the Foundation. I also tried interpreting what the teachers needed so that the Foundation understood their conditions. I know that not all aspirations can be realized immediately. Hence, I also tried to persuade teachers to understand the current situation. P-PBK6

Finally, although some challenges women leaders face in MTs in developing school infrastructure during the global pandemics still have the effort to lead the madrasah to a better chance. As for the method of bringing about change, they have chosen to invite external parties and stakeholders to work hand in hand to support the change. Internal conflicts are resolved in a familial way with a mediator's approach, which is a unique way for a 'mother' to reconcile her children. Although communication with male staff has not been optimal, choosing an alternative to the deputy principal as a communication bridge is a way

researchers consider appropriate to overcome interaction barriers among teachers and principals.

Implications

This indicated that the findings of this research project have several theoretical implications related to new insights into women's leadership in Islamic-based schools in Indonesia. Firstly, leaders as mediators and buffers are original insight into catalytic leadership. As change agents, leaders do not only need to become creative, good entrepreneurs, collaborators, and developers of strategies to address issues (Luke & Luke, 1997; Morse, 2010; Rebore Sr & Walmsley, 2008), but they must also become mediators and buffers (Kuttner, 2011; Williams & Sullivan, 2011) to overcome internal and external challenges. Leaders are required to be conflict specialists who are able to take a central role in the process of overcoming disputes among followers.

Limitations and Suggestions

The current study may still have limitations regarding how women principals provide service and connection among school members. It was found that women leaders used third parties to communicate with their subordinates. The upcoming research may be necessary into how women leaders develop confidence and communicate effectively with different gender members. Another study may focus on leaders providing service. At this stage, the study may focus on how leaders create and manage an optimal service to school members to maintain teachers' performance, like performance on utilizing technology for online learning.

The focus of this research was limited to a qualitative exploratory study utilizing interviews on woman's leadership practice during a pandemic in Madrasah tsnawiyah. There are likely to be discrepancies between self-reports and actual behaviors and practices. Further research that focuses on an ethnographic approach is essential in order to support more in-depth exploration into the insights of women's principal leadership in guiding their members after the pandemic. A mixed-method approach that utilizes a survey and interviews might accommodate collecting more significant data. The findings of such research would extend a greater understanding of the impact of indigenous leadership in Indonesia.

CONCLUSION

The Covid-19 outbreak has significantly affected many elements, including education. The restriction of interaction and the prohibition of direct interaction changed the face-to-face education system into a distance learning system (PJJ). This new system requires all parties, especially education providers or teachers, to switch to designing digital-based learning. This is undoubtedly a challenge for some teachers, especially those who still face technological, financial, and literacy technology facilities limitations. The same thing happened among students. Not all students are lucky to have access to technology and internet facilities in the online learning process. This eventually becomes an obstacle and requires special efforts to overcome it. Parents who are substitute teachers guiding their children to online school also face problems. They are not used to dealing with learning problems their children face. Even some parents do not have a background in technology knowledge, so children who still need direct guidance are hampered in mastering the learning material

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