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## Contemporary Ijtihad by Muhammadiyah on the Dawn (Fajr) Time Controversy: Analysis of Maqāṣid al-Sharī'ah and the Response of the Muhammadiyah Mosque Prosperity Council in Makassar City

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#### **Abstract**

Muhammadiyah's determination of Fajr prayer time using a sun angle of -18° has elicited varied responses from the community. This study aims to analyze Muhammadiyah's scientific approach and the accompanying social dynamics. The research employed a qualitative case-study method, involving literature studies, field observations, and semi-structured interviews with religious leaders and congregants at Muhammadiyah mosques in Makassar City. Key findings indicate that 76.19% of Muhammadiyah Mosque Prosperity Council (DKM) members accept the Muhammadiyah Central Board's criteria for determining Fair time; however, only 66.67% have implemented these criteria. This moderate implementation rate reflects a significant gap between theoretical acceptance and practical application, indicating issues of community readiness and internal communication effectiveness. Supporting factors for implementation include the availability of recent astronomical data, Muhammadiyah's spirit of tajdīd (renewal), and the integrity of falak (Islamic astronomy) methodology. Conversely, limiting factors include low public literacy, insufficient socialization at mosque-level, and congregants' apprehension about change due to unfamiliarity with the revised criteria. Analysis based on magāsid al-sharī'ah is relevant in this context. Principles such as hifz al-dīn (preserving religion), hifz al-nafs (maintaining inner peace), and hifz al-'aql (maintaining rationality) are essential considerations in contemporary ijtihad. This approach ensures that religious renewal, including the revision of Fajr prayer time, is valid in terms of Islamic law, ethical, educational, and socially acceptable. The implication of this study is the necessity to integrate astronomical aspects with strategic socialization and educational programs to enable rational acceptance of Islamic legal transformations and reduce community resistance effectively.

Keywords: Ijtihad; Fajr Time; Muhammadiyah DKM; Maqāṣid al-Sharī 'ah

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#### Introduction

The determination of the beginning of the time of Fajr is one of the important aspects of Muslim worship, because it is directly related to the implementation of Fajr prayers, fasting, and other worship. In recent decades, there has been a debate among Muslim astronomers regarding the astronomical criteria used to determine the beginning of dawn, specifically regarding the position of the sun below the horizon (solar depression) (Saad et al., 2022). Muhammadiyah, through the 31st Tarjih National Conference in 2020, revised the criteria from a solar depression of -20° to -18° (Muhammadiyah, 2021;(itra & Silvana, 2021).). This revision resulted from scientific studies by Muhammadiyah research institutions, indicating that the onset of **true dawn** (fajr ṣādiq) is more accurately observed when the sun is at -18° solar depression, aligning more closely with astronomical observations (Muhammadiyah, 2021).

The implementation of this decision in various regions of Indonesia, including Makassar City, is significant due to **Makassar's strategic role as a center for Islamic education and a Muhammadiyah stronghold**. Alamsyah (2025) specifically researched the acceptance of this new criterion among falak experts in South Sulawesi. **His findings indicated broad acceptance among Islamic astronomy experts in Makassar, but also highlighted critical challenges related to socialization and community education, suggesting a significant gap between expert acceptance and practical community adoption (News.unismuh.ac.id, 2025; South Sulawesi People, 2025).** 

However, differences of views on the definition and appearance of dawn ṣādiq remain a challenge. Recognizing this, Muhammadiyah's Central Executive instructed regional leaders to actively socialize the revised criteria through coordinated efforts involving the Tarjih and Tajdid Council, Tabligh Council, and Library and Information Council. This initiative reflects Muhammadiyah's commitment to integrating scientific rigor with religious authenticity.

The determination of the time of worship in Islam is an important part of the sharia that has a direct impact on the validity of a deed of worship. One of the most complex times of worship in its determination is the beginning of Fajr time. This time is marked by the appearance of the dawn of ṣādiq, which is a horizontal white light in the eastern sky that stretches evenly. The determination of this phenomenon involves not only visual observation, but also a precise astronomical approach.

The implications of this change are significant, impacting worship implementation and the national prayer scheduling system. As a metropolitan area with extensive Muhammadiyah presence and robust Islamic educational infrastructure, Makassar provides an ideal case study for observing the socio-religious dynamics involved in adapting to these revised criteria.

Several studies from the realm of time psychology show that the perception of time has a strong cultural and social dimension. In the context of religious practice, time is not

only understood physically, but also symbolically and rhythmically interpreted (Zimbardo & Boyd, 1999). Thus, changes in the criteria for Fajr time can affect people's perception of their daily religious rhythms.

Further, community involvement in the implementation of changes like this is highly dependent on how information is conveyed and mediated. Grimes (2014) in *The Craft of Ritual Studies* states that the transition in ritual or religious practice requires an approach that combines scientific and narrative dimensions in order to be accepted by the community This applies in the context of the socialization of the new criteria for Fajr time by Muhammadiyah in Makassar.

In another study, Zhang et al. underscored the importance of balance in the perception of time to support people's happiness and psychological stability (Zhang et al., 2013). In this context, the accuracy of the determination of the time of Fajr which is more in accordance with astronomical reality can reduce the potential for religious stress due to doubts about the validity of worship. Therefore, the revision of the criteria by Muhammadiyah is not purely technical, but also touches on a broader psychosocial aspect.

Overall, the change in the criteria for the beginning of Fajr time by Muhammadiyah and its implementation in Muhammadiyah mosques in Makassar City reflect the dynamics between science and belief. In an urban society with wide access to technology and information, an integrative approach between astronomy, sociology of religion, and public education is the key to success in the implementation of science-based religious policies. This research tries to explore how the process takes place in Makassar, as well as the challenges and opportunities in building data-based and spiritual religious practices.

This study aims to analyze the implementation of the revision of the Fajr time criteria in Muhammadiyah Mosques in Makassar City, identify the factors faced by the community and astrologers, assess the impact of the change in criteria on public perception of the validity of worship. In another context, the change in the criteria for the time of Fajr must also be seen through the perspective of *Maqāṣid al-sharī'ah*, which is the main goal of Islamic sharia which includes the maintenance of religion, soul, intellect, descent, and property. Accurate and legal timing can help maintain the validity of worship, ensure the validity of fasting, and increase public understanding of the suitability of religious practices with broader Islamic sharia principles.

#### Method

The type of research used is field research using a case study design with a descriptive qualitative approach. This approach allows researchers to deeply understand the social, cultural, and technical context in the implementation of Muhammadiyah's revised criteria for determining Fajr prayer time in Makassar City. Qualitative research effectively explores complex and contextual socio-religious phenomena (Aspers & Corte, 2019). The research location was Makassar City, focusing on Muhammadiyah mosques, by sampling 18 mosques representing each PCM within Muhammadiyah Regional Leadership, coupled with three special mosques fostered directly by Muhammadiyah regional leaders. The purposive sampling method is widely used in religious qualitative studies because it allows the selection of data-rich sources (Morse & Coulehan, 2015; Hanafi et al., 2022; Nyimbili & Nyimbili, 2024; Ahmad & Wilkins, 2024; Azmi et al., 2020). Data collection involved semi-structured, in-depth

**interviews** to explore informants' perceptions and experiences regarding the revised dawn time. Data analysis employed the Miles and Huberman (Matthew B. Miles, A. Michael Huberman, 2014) model: data reduction (sorting key data), data presentation (organizing into systematic narratives), and conclusion verification (cross-checking through triangulation).

This research employed a descriptive qualitative approach through field research to examine the implementation and social dynamics associated with Muhammadiyah's revised criteria for determining the beginning of Fajr prayer time in Makassar City. A qualitative design was chosen because it allows for an in-depth exploration of complex socio-religious phenomena, providing detailed insights into social, cultural, and technical contexts directly relevant to the study's objectives (Aspers & Corte, 2019).

The research utilized a case study design, specifically focused on Muhammadiyah mosques within Makassar City. This design was selected because it provides comprehensive insights into specific cases, allowing detailed analysis of how the new criteria have been adopted within distinct social and organizational contexts. The unit of analysis consisted of Muhammadiyah mosques represented by the Mosque Prosperity Council (DKM), individual religious leaders, and congregants actively involved in mosque management and worship practices. The choice of this design aligns directly with the objective to examine community-level responses and practical implementation challenges.

Data collection involved semi-structured, in-depth interviews, supplemented by direct observations and review of relevant documents. Interviews were chosen because they allow flexibility to probe deeper into informants' experiences and perceptions. The semi-structured interview guide ensured consistency across interviews while allowing exploration of emerging themes relevant to the study's purpose. Key informants included mosque leaders, religious scholars (ulama), and active worshippers identified as influential in community religious practice and decision-making processes. The selection of informants explicitly targeted those directly involved in decision-making and influential in community adoption of the revised criteria.

Observations were conducted during Fajr prayer times to document actual practices and verify interview data. Observations focused on mosque activities, community participation, and practical adherence to the revised timing criteria. Document analysis included reviewing official guidelines, mosque records, Muhammadiyah publications, and related scientific reports, providing secondary data to contextualize and triangulate primary findings.

Ethical considerations were rigorously upheld throughout the research process. Informed consent was obtained from all interview participants, ensuring confidentiality and voluntary participation. Ethical guidelines included clearly explaining the research purpose, respecting informant privacy, and ensuring anonymity in reporting findings. These ethical procedures were critical to gaining trust and encouraging honest, comprehensive responses from participants.

## Result

# A. Correction of the Criteria for the Beginning of Dawn Time by Muhammadiyah

The 31st National Tarjih Conference of Muhammadiyah in 2020 determined the correction of the criteria for the beginning of Fajr time from the height of the sun to -18°

below the horizon. This decision was based on an integrated fiqh and astronomical study which concluded that the previously used  $-20^{\circ}$  solar depression resulted in dawn occurring approximately 8 minutes too early compared to the actual appearance of *fajr*  $s\bar{a}diq$  (Muhammadiyah, 2021).

This study was conducted by three Muhammadiyah institutions. First, the UMSU Astronomy Observatory (OIF) used the Sky Quality Meter (SQM) to measure sky brightness levels in Medan and surroundings. Results indicated that light pollution significantly influenced observational accuracy, with the observed solar altitude averaging -16.48°, thus differing notably from the previously established -20° criterion (Butar-Butar, 2020).

Second, the Center for Astronomical Studies (PASTRON) of UAD conducted similar research in Yogyakarta, noting that moon phases and varying levels of light pollution considerably affected solar altitude measurements, with the lowest recorded altitude being -15.75°, further supporting the need for revised criteria (Muhammadiyah, 2021).

Third, UHAMKA's Islamic Science Research Network (ISRN) conducted observations in multiple cities in Indonesia and internationally using DSLR, All-Sky, and drone cameras. Their data from 750 days of dawn observations revealed solar altitude variations between -18.4° and -7°, predominantly around -13°, reinforcing the variability and complexity in determining accurate dawn criteria (Saksono, 2017).

These findings were further supported by research from astronomers at the Bandung Institute of Technology and international studies. Zainuddin et al. (2020) in Malaysia concluded the ideal solar altitude for Fajr time is -18°, a standard also adopted internationally by Turkey, the United Kingdom, and Malaysia (Abdel-Hadi & Hassan, 2022).

These findings are strengthened by research from astronomers from the Bandung Institute of Technology and from abroad. Research by Zainuddin et al. (2020) in Malaysia concluded that the ideal solar altitude for the time of Dawn is -18°, a value also used by Turkey, the United Kingdom, and Malaysia (Abdel-Hadi & Hassan, 2022).

The decision to correct the time of Fajr was then ratified by the Central Executive of Muhammadiyah on March 20, 2021 through Decree Number 734/KEP/I.0/B/2021, making it an official guideline for all Muhammadiyah citizens(Abdel-Hadi & Hassan, 2022); (Muhammadiyah, 2021).

However, a survey after one year of implementation showed that most Muhammadiyah mosques in Makassar City, especially within the scope of Makassar City PDM, still did not implement the decision consistently. This highlights significant challenges in community acceptance and internalization of scientific ijtihad results at practical and socio-religious levels.

### B. Data Data of Muhammadiyah Mosque in Makasassar City

The Muhammadiyah movement in Makassar City actively engages in da'wah activities through numerous mosques spread across various branches. These 45 mosques serve as key platforms for disseminating Muhammadiyah's religious teachings and socializing central-level decisions among community members.

The following is a list of Muhammadiyah mosques and DKM spread across several Muhammadiyah Branch Leaders (PCM) within the scope of PDM that have been obtained by the author sourced from the Makassar City PDM secretariat are:

Table 1
Data of Muhammadiyah Mosque in all PCMs within the scope of PDM Makassar City
(Document provided by PDM Staff along with a letter of introduction to the research in May 2024 at PUSDIM.)

	May 2024 at PUSDIM.)						
No	Mosque Name Address						
	Regional Leader of Muhammadiyah South Sulawesi						
1	PUSDAM Jl. Perintis Kemerdekaan km 10						
	Regional Leadership of Muhammadiyah Makassar City						
2	Nurul Anshar Jl. Ir. Sutami Parang Loe						
	Unismuh Makassar						
3	Subussalam Al-Khoory Jl. Sultan Alauddin						
	1. PCM Tallo						
4.	Da'watul Haq Jl. Lembo						
5.	Nidaul Haq Jl. Butta butta ca'di						
6.	Al Furqan Jl. AR. Hakim						
7.	Syuhada Jl. Datuk Ditiro						
8.	Muhajirin Jl. Dg. Tantu						
	2. PCM Ujung Tanah						
9.	Hizbul Wathan Jl. Satando						
	3. PCM Makassar						
10	Ta'mirul Masajid Jl. Banda						
11	Al Fajri Jl. Muna						
12	Nurul Taufiq Jl. Diponegoro/Buru						
	4. PCM Bontoala						
13	Nurul Hidayah Jl. Kapopposang						
	5. PCM Maccini						
14	Jabal Nur Jl. Kebangkitan						
15	Sitti Aisyah Jl. Kemauan I						
	6. PCM Bara-Barayya						
16	Al Munawwarah Jl. Abu Bakar Lambogo						
	7. PCM Lariangbangngi						
17	Nurul Wathan Jl. Baronang						
18	Fastabiqul Khaerat Jl. Gusung Maccini						
	8. PCM Panakkukang						
19	Shautul Balagh Jl. AP. Pettarani II						
20	Ihyaussunnah Jl. Maccini Raya						
	9. PCM Tello Baru						
21	Rahmatullah Jl. DR. laemena						
22	Nurul Iman Jl. Toddopuli						
	10. PCM Manggala						
23	Umar Bin Khattab Borong Jambu						
24	Rahmatullah Kassi						
	11. PCM Karunrung						
25	Ridha Jl. Tamalate						
26	Nurul Ishlah Jl. Emmy Saelan						
	12. PCM Jongaya						

6

27	Muallim Jl. Kumala				
13. PCM Mariso					
28	Darul Istiqamah	ırul İstiqamah Jl. H.Bau Buntu /Kokolojia			
29	Mattiro Baji	Jl. Cendrawasih V			
	14. PCM Sambung Jawa				
30	Al Fatah Jl. Tanjung Alang				
		15. PCM Mamajang			
31	Nuruddakwah	Jl. Badak			
32	Fajar Shadiq Jl. Landak Baru				
		16. PCM Pisang			
33	Ta'mirul Muslimin	Jl. G. Lompobattang			
	17	7. PCM Biringkanaya			
34	Al Munawwarah	Pasar Daya			
35	Al Bustan	Jl. Paccerakkang Berua			
36	Ponpes Gombara Jl. Ir. Sutami				
		18. PCM Maricaya			
37	Al Ikhwan	Jl. Pelanduk			
	19. PCM Minasaupa				
-					
20. PCM Mimbar					
-					
21. PCM Layang Paranglayang					
	-				

Based on the data in the table above, it was found that, out of a total of 21 PCMs, only 18 PCMs have mosques in their administrative areas. The other 3 mosques that the researcher added in the study are mosques, each of which is directly fostered/managed by the Muhammadiyah Regional Executive based in Makassar City called the PUSDAM Mosque, PDM at MBS Awwalul Islam called the Nurul Anshar mosque and the Unismuh Makassar Campus Mosque named Subulussalam Al-Khoory. From the total number of mosques recorded in PDM, based on the sampling technique used, the researcher selected 1 mosque in each branch, plus 3 mosques specially fostered by PWM, PDM and the University of Muhammadiyah Makassar campus, which are as follows:

Table 2
Muhammadiyah Mosque data that is researched in each PCM within the scope of PDM
Makassar City

No	Mosque Name	DKM & No. HP	No	DKM & No. HP	Mosque Name	
Regional Leader of Muhammadiyah South Sulawesi-Selatan			9. PCM Tello Baru			
1	PUSDAM	Ust. Kamsar (085255115336)	12	Rahmatullah	Ust. Abubakar Muttaqin (085200008707)	
Regional Leadership of Muhammadiyah Makassar City			10. PCM Manggala			
2	Nurul Anshar	H. Ridwan Tajrin (081342597845)	13	Babul Muttaqin	Ust. Y. Muslimin (082344172812)	

Unismuh Makassar			11. PCM Karunrung			
3	Subussalam Al- Khoory	KH. Abbas Baco Miro (085255669205)	14	Ridha	Ust. Mukhdar Boli (081355469155)	
	1. PCM Tallo			12. PCM Jongaya		
4	Da'watul Haq	Zakariya (082189175353)	15	Muallim	H. Mudzakkar (082196640110)	
	2. PCM Ujung Tanah			13. PCM Mariso		
5	Hizbul Wathan	Ust. Junaedi (081354595949)	16	Mattiro Baji	H. Hanis Haruna (085256691415)	
	3. PCM	Makassar		14. PCM	Sambung Jawa	
6	Ta'mirul Masajid	Ust. Muslimin (085298422216)	17	Al-Fatah	H. Padewakkang (085342020876)	
	4. PCM	Bontoala		15. PCM Mamajang		
7	Nurul Hidayah	Ust. Syamsul Arif (085242058108)	18	Fajar Shadiq	Ust. Shafri Hamid (082187466660)	
5. PCM Maccini				16. PCM Pisang		
8	Jabal Nur	H. M. Yusuf (081355497446)	19	Ta'mirul Muslimin	Ust. Baharuddin Djafar (0823133156892)	
	6. PCM Bara-Barayya			PCM Biringkanaya		
9	Al Munawwarrah	Ust. Muh. Tamrin Diki (081354752229)	20	Ponpes Gombara	Ust. Muh. Sufyan Tahir (082187000026)	
	7. PCM Lariangbangngi			PCM Maricaya		
10	Nurul Wathan	Ust. Hayadi (082187359774)	21	Al Ikhwan	Ust. Rahmat Khairul (0895800365403)	
8. PCM Panakkukang						
11	Shautul Balagh	H. Kaharuddin (081355200881)				

### **Discussion**

Based on interviews conducted with respondents, the analysis was compiled and presented in a frequency distribution table, illustrating the proportion of respondents who were aware, agreed, and had implemented the Muhammadiyah Central Board's decision. These descriptive statistics provided clear insights into the community's response.

In sampling, the author uses sampling techniques in accordance with qualitative research methods, purposive sampling. This is in accordance with the consideration that the purpose and purpose of this study is to find out the response and implementation of the Muhammadiyah DKM related to the Decision of the Muhammadiyah Central Government regarding the initial correction of the dawn prayer time that has been tanfidzzed after being agreed at the XXXI Tarjih National Congress.

The following are the results of the interviews that have been obtained which are then converted into a frequency distribution table.

Tabel 3
Response of DKM Muhammadiyah Mosques to Muhammadiyah Dawn Time
Criteria

NI.	Question Items	Answer			
No		Yes	Percentage	Not	Percentage
1	Do you know that there is a decision of the Central Executive of Muhammadiyah regarding changes in the criteria for the beginning of Fajr?	15	71,43%	6	28,57%
2	Do you agree with Muhammadiyah's decision regarding the new criteria for the beginning of Fajr?	16	76,19%	5	23,81%
3	Has the change in the beginning of Fajr time from Muhammadiyah been applied in congregational prayer activities at your place?		66,67%	7	33,33%
	sum	45	214,29%	18	85,71%
	average	15	71,43%	18	28,57%

# A. Analysis of Data on the Response of DKM Muhammadiyah to the Decision of Early Dawn Correction

A substantial majority of respondents 71.43% were aware of the Muhammadiyah Central Executive's revised criteria for determining dawn prayer times, reflecting effective communication among many mosque administrators. However, the fact that 28.57% remained unaware suggests significant shortcomings in disseminating this information at grassroots mosque levels.

Interestingly, the decision received a higher rate of approval 76.19% than awareness, indicating robust ideological alignment with Muhammadiyah's new jurisprudential approach (ijtihad), even among those lacking detailed knowledge. The minority 23.81% expressing disagreement likely had reservations stemming from technical complexities, concerns regarding congregational readiness, or hesitation in altering established religious practices.

Practical implementation, however, lagged behind ideological acceptance, with only 66.67% of respondents applying the revised prayer times. A notable gap thus emerged between theoretical approval and actual practice. Factors impeding implementation included inadequate socialization, limited availability of human resources skilled in Islamic astronomy (Falak), insufficient access to updated scheduling tools, and apprehensions about potential divisions within congregations.

Overall, respondents showed an average positive inclination of 71.43% toward knowledge, acceptance, and implementation of the new criteria, suggesting favorable attitudes among Muhammadiyah mosque administrators in Makassar City. Nonetheless, the challenges encountered underline the necessity for improved and structured educational strategies, enhanced socialization campaigns, increased training in Islamic astronomy, and the provision of practical tools such as digital prayer schedules. Adopting

a participatory and educational approach with congregational involvement is crucial to effectively bridging the gap between normative guidelines and their practical implementation.

# B. Factors for the Implementation of Muhammadiyah Fajr Prayer Time Criteria at DKM Muhammadiyah Makassar City

## 1. Supporting Factors

The DKM members who support this decision emphasized that the revised criteria resulted from extensive and rigorous research conducted by Muhammadiyah's scientific experts, and it represents a binding and authoritative ruling (tarjih decision) for all Muhammadiyah members. Abbas Baco Miro (2024), Secretary of the Tarjih & Tajdid Council of PWM South Sulawesi, highlighted this stance: "The criterion of -18° solar depression is an official Muhammadiyah verdict and must be adhered to ('sami'na wa atho'na'). Muhammadiyah mosques have a religious obligation to implement such decisions, reflecting the organizational principle of obedience and unity, as stated in QS Al-Saff verse 4." Thus, the strong ideological acceptance significantly supports implementation (Miro, 2024).

## 2. Inhibiting Factors

### a. Lack of Socialization

Based on information from DKM H. M. Yusuf and M. Natsir Baco.

"He said that there had been no official circular to this mosque regarding this information. Because there is a digital and all-time clock schedule that is used as a benchmark. And usually, this mosque is the last adhan compared to the surrounding mosques so it is relatively late. It is also a dilemma for the management because the congregation is used to the previous time, so there is the potential for polemics within the congregation. Because this has become a habit. Through interviews, the author collected opinions on the correction of the criteria for the beginning of dawn in Muhammadiyah" (Baco, 2024).

Socialization is crucial in policy implementation, emphasizing social processes and interactions. Normalization Process Theory (NPT) clearly illustrates the need for collective and collaborative efforts to integrate changes into everyday mosque practices (de Brún et al., 2016; (May, 2022). To overcome this, Complexity Theory (Chandler et al., 2016) suggests that Muhammadiyah regional leaders must actively engage congregations, facilitating self-organization and adaptability in the face of resistance toward prayer-time changes.

## b. Limited Human Resources (HR) of Islamic Astronomers

HR is the most important resource in organizational development (Rajalakshmi & Gomathi, 2015). In the process of implementing the early Fajr time of Muhammadiyah in mosques in Makassar City, the existence of competent and visionary human resources (HR) is a crucial factor that determines success. Socialization of science-based policies like this not only requires accurate technological tools and scientific methods, but also human resource figures who are able to bridge science and religion in a communicative and educational manner.

According to Mokobombang, an effective human resource development strategy must involve improving knowledge, communication skills, and social sensitivity to adjust organizational policies to the needs of local communities. He said that strategic HR transformation can create a broad impact on community-based decision-making, including in religious contexts such as prayer times

(Mokobombang & Natsir, 2024). This is in line with the view of Wijayanti who emphasizes that the ability of human resources to master communication across fields, including foreign languages and digital literacy, is very important to effectively convey ideas to audiences with diverse backgrounds. In the context of Muhammadiyah, the ability to socialize the postulates and methods of hisab used in determining the time of prayer becomes more acceptable if it is conveyed by human resources who are authoritative and master the substance (Wijayanti & Napitupulu, 2024).

Furthermore, Badawi and Nugroho emphasized that human resource development must also include continuous training so that they can adapt to technological changes and socio-religious dynamics. In the implementation of the Muhammadiyah Subuh time which refers to certain astronomical parameters, continuous education is important to avoid public resistance due to miscommunication or lack of understanding(Badawi & Nugroho, 2022). As explained by Zaky (2022), human resource training and development not only focus on technical and procedural, but must also touch on aspects of ethics, spirituality, and the spirit of sincerity in carrying out da'wah duties. Muhammadiyah human resources involved in the development of Fajr time should ideally be equipped not only with scientific competence, but also with moral integrity(Zaky, 2022).

Therefore, in the process of internalizing the time of Muhammadiyah Fajr in Makassar City, increasing the capacity of human resources is the main foundation. Community literacy will only grow if socialization is carried out by human resources who are trained, communicative, and have scientific and spiritual authority in the eyes of the congregation.

## c. There is no official digital clock issued by Muhammadiyah

The implementation of accurate prayer times is an important element in maintaining the consistency of worship and ensuring social order in the Muslim community. In the modern context, the use of a digital prayer clock not only serves as a time marker, but also as an important instrument in ensuring the compatibility between the actual prayer schedule and the astronomical hisab rules used, including in the implementation of Fajr time by Muhammadiyah. The Muhammadiyah Mosque in Makassar City as the center of religious activities has a great responsibility in implementing the Fajr time schedule based on Muhammadiyah's astronomical criteria, which generally determine the beginning of Fajr time when the sun is at the position of -18° below the horizon. Small errors in the implementation of this time, either due to incompatibility with digital time devices or lack of up-to-date astronomical data integration, can result in doubts or mistakes of the ummah in carrying out prayers.

A digital prayer clock with an integrated data-based system can help ensure that the time displayed is in accordance with the official hisab schedule, as well as being collectively aligned between mosques under the auspices of Muhammadiyah. As mentioned by Ismail (2022), the accuracy of prayer time is very closely related to the validity of worship itself, and time errors can occur because mosque hours are not standardized or poorly maintained(Ismail, 2020). Furthermore, training and briefing to mosque administrators on the use and calibration of digital clocks are needed. Rahmadi (2023) shows that public understanding of the correct prayer time

still needs to be improved through prayer time standardization training based on modern hisab (Rahmadi et al., 2024).

## d. Avoiding Polemics from Internal Worshippers

The Chairman of the DKM Mattiro Baji Mosque named H. Hanis Haruna gave an explanation that:

"To be easily accepted by the community, there must be deliberation because we are worried about complaints from worshippers. So that the mosque has not implemented this correction because it is the reason that there is no circular and this mosque is already uniform with the surrounding mosque in determining the time of its prayer through a digital clock that is set in such a way" (Haruna, 2024).

This viewpoint aligns with the concept of maslahah mursalah (Hamzani, Ahmad Irwan, Ahmad Seoharto, 2023), which underscores prioritizing community welfare and minimizing harm in legal implementation (Lobah, 2016; Muhammadi et al., 2021). Although scientifically accurate, the revised -18° criteria can lead to social resistance if introduced without adequate preparation. As (Rahmadi et al., 2024) highlighted, astronomical precision must be balanced with structured community education and dialogue to avoid confusion or suspicion regarding worship validity.

Furthermore, Isnaini and Husen emphasize that Islamic astronomical da'wah should incorporate culturally sensitive communication strategies, highlighting the necessity for structured education and collective deliberation within the congregation. Integrating maqāṣid al-sharī'ah principles ensures that changes are gradual, accepted wisely, and contribute to community harmony (Khairani et al., 2025).

# C. Evaluation and Implementation of Muhammadiyah's Fajr Time Criteria from the Perspective of Maqāṣid al-Sharī'ah

In his monumental work al-Mustaṣṭā fī 'Ilm al-Uṣūl, al-Ghazālī states (1993), *the* objective of Islamic law is to preserve five things: religion, life, intellect, lineage, and property (al-Ghazāli, 1993). Based on the supporting and inhibiting factors described above, it is essential to analyze them through the perspective of maqāṣid al-sharī'ah, a fundamental Islamic legal concept referring to the broader objectives of Sharia (Azli et al., 2011); (Alias et al., 2024). ; (Rahman, Encep Taufik, M.A.E. Dunur'aeni, ahmad sugenda, hisyah ahyani, 2023). The implementation of Muhammadiyah's revised Fajr time criteria should be assessed in terms of its alignment with these higher objectives, which serve as ethical and social foundations. These objectives include:

- 1. Hifzh al-Dīn (safeguarding religion), so that the implementation of worship, especially the Fajr prayer, is carried out with beliefs based on valid knowledge and in accordance with the rules of falak (Nur et al., 2020). Maintaining religion also includes maintaining the validity of worship from doubt and error. Maqāṣid alsharī'ah is important in ensuring that legal reforms such as the revision of prayer times do not obscure the value of worship itself (Alias et al., 2024).
- 2. Hifzh al-Nafs (preserving inner tranquility) is critical, as sudden or poorly communicated changes in worship times can induce anxiety and uncertainty among congregants regarding worship validity (Khan & Nisa, 2024); (Afsaruddin, 2025). Islam emphasizes decision-making through collective deliberation (shura), which fosters acceptance, reduces anxiety, and promotes social harmony communities

- (Büssing et al., 2021); (Jankowski et al., 2022). Thus, gradual implementation combined with adequate community engagement is vital for ensuring peaceful and stable acceptance.
- 3. Hifzh al-'Aql (preserving reason) emphasizes maintaining rational understanding among the community toward legal changes. Structured education and clear communication about the reasons behind revising Fajr time are essential to prevent confusion and speculation (۲۰۲۰); (Bahri, 2021). Ibn Qayyim al-Jawziyyah supports the principle that Islamic law must adapt according to changing societal contexts, underscoring the necessity for continuous legal renewal to maintain relevance and fairness in contemporary practice (Ningsih, 2025).

Thus,  $maq\bar{a}sid\ al\text{-}shar\bar{\imath}'ah$  serves not only as a conceptual framework but also as a critical standard for evaluating religious policies, such as Muhammadiyah's revised Fajr prayer time criteria. The maq $\bar{a}sid$  perspective demands that religious innovations consider the broader welfare of the community, potential harms, and social readiness to embrace change. Therefore, the balance between safeguarding religion ( $hifz\ al\ d\bar{\imath}n$ ), reason ( $hifz\ al\ 'aql$ ), and inner tranquility ( $hifz\ al\ -nafs$ ) is crucial, ensuring that the revised criteria do not create confusion, tension, or rejection. Effective implementation through gradual socialization and community education is thus essential to achieving acceptance and minimizing resistance.

### Conclusion

Based on the study findings, although 76.19% of Muhammadiyah DKM in Makassar City accepted the Muhammadiyah Central Executive's decision on the revised Fajr criteria, only 66.67% have implemented it, indicating a moderate level of application. Several critical obstacles hinder full implementation, including insufficient socialization efforts, limited expertise in Islamic astronomy (falak), lack of official supporting tools like digital clocks, the absence of a standardized Muhammadiyah prayer schedule, and apprehension regarding potential internal conflicts among congregants accustomed to the previous prayer times.

This situation underscores the urgent need for a more structured socialization strategy, enhancement of human resource capacity in Islamic astronomy, and provision of adequate practical support. Concrete measures such as developing an official and standardized Muhammadiyah prayer schedule, alongside public education based on both religious and scientific reasoning, are crucial. Implementing these strategies will facilitate effective adoption and greater congregational acceptance. This analysis, reinforced by the *maqāṣid al-sharī'ah* framework, highlights three key principles: ḥifz al-dīn (preserving religious authenticity through accurate worship practices), *ḥifz al-nafs* (ensuring community tranquility by avoiding unnecessary unrest), and *ḥifz al-'aql* (promoting rational understanding through comprehensive education).

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