

Facilities Management Practice in Traditional Pondok Institution in Malaysia

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ABSTRACT

The Pondok educational system, one of the earliest in the Malay Archipelago, focused on Islamic studies. Since then, the development of the Pondok required more attention in many aspects. However, limited studies have been conducted on these issues, mainly due to a lack of awareness regarding the need of proper facilities management in Pondok Institution in Malaysia. This research aims to propose practical strategies to improve facilities management practice in traditional Pondok institutions. There are two objectives for this research. First, to examine the barriers in managing the facilities provided in Pondok institution. Second, to propose practical, effective facilities management in Pondok institution. A quantitative approach is used in this research. The data was collected by using questionnaire surveys to meet the objectives. The result of the study found that a holistic strategic approach to acknowledge the barrier as well as enhance the legislative, management and guidelines are needed for the Pondok institutions to ensure the effectiveness of facilities management planning can be achieved. It is hoped that the study can contribute to the improvement of effective planning of facilities management to the Pondok institutions in Malaysia.

INTRODUCTION

Effective facilities management is crucial for maintaining a conducive learning environment, enhancing the operational efficiency of educational institutions, and ensuring the safety and comfort of students and staff

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(Fatmawati et al., 2019). To achieve these conditions, the facilities provided in these institutions play an important role in supporting a conducive environment in the teaching and learning process. However, traditional Pondok schools often lack the necessary funds, resources, expertise, and modern practices required for effective Facilities Management (FM). This results in deteriorating physical conditions that can negatively impact students' academic performance, health, and overall well-being (Rizky et al., 2022). Nevertheless, Pondok institutions (PI) frequently operate with limited financial resources and rely on traditional methods that may not address current FM needs.

According to Sufian & Mohamad (2013), there is a lack of specific legal provisions, guidelines, or formal requirements for the establishment of PI either by the state religious council nor the planning authorities. According to Takwate (2018), the lack of laws and regulations governing the development of PI may lead to issues related to the facilities and infrastructure provided. Therefore, the objectives of this research are, first, to examine the barriers in practicing the facilities management provided in traditional PI, and second, to propose practical effective FM to improve facilities management in traditional PI.

LITERATURE REVIEW

Kamaruzzaman & Zawawi (2010) mentioned that commercial buildings should have their own supervisory crew to monitor the conditions of the buildings. Typically, building or maintenance managers oversee this FM team. Building managers offer a variety of services, including upkeep, cleaning, landscaping, lighting, Heating, Ventilating and Air-Conditioning (HVAC), elevators or escalators, mechanical and electrical, sanitary and plumbing, access, signage, parking, and other services (Nik Mat et al., 2011). The existence of government standards for facilities and infrastructure, along with complete facilities and infrastructure, can improve the effectiveness and efficiency of facilities management, helping educational institutions reach their goals (Amelia et al., 2022).

According to Takwate (2018), planning for school facilities refers to the process of purchasing and creating educational tools that meet students' demands. Therefore, the primary purpose of planning school facilities is to choose an appropriate location, design and construct buildings that meet the standards, and purchase other amenities and equipment. Similarly, Filardo (2008) added that there is a connection between the school's amenities and how well students learn. Significant barriers exist in practising facilities management provided in PI, namely, (i) fund allocation, (ii) expertise and staff (human resources), (iii) space and layout, (iv) policies and procedures, (v) quality of equipment and facilities, (vi) maintenance management planning and procedures, and (vii) building age.

Fund Allocation

Most PIs in Malaysia are currently facing financial issues. The main financial resources for these institutions still depend on the contributions made by society, particularly for unregistered Pondok, such as zakat, waqaf, infaq and donations (Salleh et al., 2021). Waqaf is seen as a tool that can allow organisations to finance their own growth, compared to the other financial tools. However, not all PIs have the capability to develop, generate and sustain their finances through waqaf, as they confront various difficulties (Fazial & Bahari, 2018).

According to the study carried out by Ramli and Abu Bakar (2013), PIs in Malaysia depend on permanent resources like land and waqaf buildings for the sustainability of the Pondok education. This statement is supported by Hashim et al. (2011), who conducted a comparative study between PIs in Malaysia and Pondok pesantren in Indonesia.

Expertise and Staff

According to Salleh et al., (2021), most of the teachers are remunerated with lower salaries compared to normal schools as they are paid under a government agency. Despite the lower salary offered to the teachers, they are willing to work and contribute their thoughts and knowledge to the students. Thus, a lack of expertise and staff leads to constraints in implementing effective facilities management as their ideas and productivity contribute to achieving the best mission and vision of an organisation (Mong et al., 2019). Research by Setyowati et al. (2024) stated that Islamic education management is not only about administration but also requires sufficient human resources.

Space and Layout

The messy arrangement of these facilities due to insufficient space, leading to an unconducive and uncomfortable place to study, will decrease students' performance in their studies (Earthman, 2002). Besides that, according to Salleh et al. (2021), some of the Pondok schools are not fully utilising their space, which could be used as an edible garden that could be developed to allow the Pondok's residents to engage in useful activities during free time. This would also help them save their money and consume healthier food from their homegrown vegetables.

Policies and Procedures

Every organisation has its own policies to ensure it is well operated. Even though each local authority has different objectives and standards, the owners of PIs are obligated to provide facilities and services to build and support sustainable infrastructure for their residents (Mong et al., 2019). According to Salleh et al. (2021), local municipalities are not engaged directly with the PI because they do not pay yearly property tax, as the development of the PIs did not apply for a "Certificate of Completion and Compliance (CCC)". This causes many issues, such as the absence of rubbish collection for these properties.

Maintenance Management Planning and Procedures

According to Ahmad (2022), maintenance can be divided into two categories, namely, (i) planned maintenance and (ii) unplanned maintenance. Planned maintenance is maintenance work that is structured, carried out as planned, controlled and recorded. It includes scheduled and condition-based maintenance. Unplanned maintenance refers to unexpected maintenance due to sudden breakdowns or malfunctions of the equipment. Managing facilities in Pondok schools involves navigating various barriers, including limited funding, lack of expertise, inefficient space and layout, the absence of formalised policies, low-quality equipment, inadequate maintenance planning, and the challenges posed by older buildings.

Strategies Facilities Management Practice Pondok Institution

Facilities management in Pondok institutions involves a multi-level approach to ensure that the physical environment supports the educational and spiritual objectives of the institution. At the strategic level, the focus is on the legislative framework and procedures that govern the facilities management practices within Pondok institutions. This includes compliance with national and local regulations, as well as the development of policies that guide long-term planning and the allocation of resources (Chkheidze, 2023). By implementing policies, providing funding, and establishing frameworks that support the optimal functioning of educational facilities, this level of organisation is responsible for making policies and ensuring that procedures are well established to guide the tactical level.

At the tactical level i.e Management and Operational, a facilities management plan is implemented through cooperation with the Pondok staff, including maintenance personnel, to develop a comprehensive facilities management plan (Zurainan et al., 2021). This approach assigns clear responsibilities to the respective team, creates a schedule for routine maintenance, and ensures urgent repairs can be addressed quickly by the team. This ensures the prolonged life of school facilities (Parnwell, 2015). In addition, this organisational level may form partnerships or collaborations with local businesses, community organisations, and government agencies to support facilities management initiatives by exploring the opportunities for collaborative projects and resource-sharing between the parties involved (Parnwell, 2015).

At the operational level, the focus is on the end users, primarily the students, teachers, and staff who utilise the facilities daily. Ensuring their needs and feedback are integrated into facilities management practices is crucial for creating a supportive environment (Chkheidze, 2023). End users of PIs also play important roles in contributing to the effectiveness of facilities management. According to Mohd Zain (2019), their involvement can contribute to a positive and conducive learning environment through their feedback about the condition and functionality of the facilities. Concerns and complaints from end users need to be assessed by the tactical and strategic levels to maintain a positive environment in PIs. As part of the analysis, it is important to set effective preventive actions. (Amie-Ogan & Bikiya, 2020).

METHODOLOGY

A questionnaire survey (5-point Likert scale agreement level) was used to collect quantitative data regarding the barriers in practising the FM provided in PI, as well as perceptions and experiences of the stakeholder's strategies to improve FM practices in PI. The Cronbach's alpha value was used to assess the reliability and validity of the data. It was also used to evaluate the dependability of social science research (Bonett & Wright, 2014). The population for this study consists of PIs in Malaysia, which was derived from the YPPM website, and consists of 341 Pondok schools in Kelantan. Kelantan was selected due to the highest number of PIs in Malaysia. A total of 200 sets of questionnaire surveys on strategies to improve FM practices in PI were distributed to the respondents. Of these, 145 questionnaire surveys were returned and then analysed using SPSS. The targeted respondents of this study included Pondok operators, teachers and management staff from all the 89 Pondok schools in Kelantan. The survey was conducted by distributing the questionnaire surveys through electronic mail and WhatsApp chat to the respondents.

RESULTS AND DISCUSSION

Barrier in FM for Pondok Institution

Table 1 presents the frequency, mean, and rank of the barriers to FM implementation in PI. Fund allocation was identified as the highest mean score (4.83), which contributed to the largest barrier in implementing better facilities management in PI. Funds are mostly received from society contributions and waqaf from certain organisations. This is supported by a study carried out by Ramli & Abu Bakar (2013), which stated that PIs in Malaysia depend on permanent resources like land and waqaf buildings for the sustainability of the Pondok education. This statement is strengthened by Hashim, Rufai & Nor (2011), who performed a comparative study between PIs in Malaysia and Pondok pesantren in Indonesia.

The second barrier, with a mean score of 4.49, was inconsistent policies and procedures. Due to the lack of policies and procedures established for PI development, the management of facilities is unable to

comply with the regulations as policies and procedure are ambiguous and unclear, i.e., clear specifications on the size of dorms, classes, as well as other facilities.

Third, space and layout of the Pondok was ranked third with a mean score of 4.44. This factor is important because of insufficient space: the layout arrangement of the Pondok becomes disorganised, which might lead to unexpected incidents such as fire. When space is limited, the arrangement of the buildings becomes disorderly; for ipor

nstance, the prayer hall is used as a classroom or canteen.

Maintenance management planning and procedures was ranked fourth with a total mean score was 4.30. Based on the table, it shows that this factor contributes to the constraint in managing facilities in Pondok. This is due to improper maintenance planning and procedures, which can lead to serious damage to the facilities. As the facilities in Pondok have a long lifespan, proper maintenance should be carried out to prolong it. If maintenance is not properly managed, it will reduce the lifespan of the facilities. As mentioned by Mong et al. (2019), appropriate identification of defects and the implementation of remedial measures based on technical knowledge can contribute to effective building maintenance. Thus, proper planning for maintenance should be well prepared to avoid serious issues when the facilities are nonfunctional.

Next, the quality of equipment was ranked fifth with a mean score of 4.20. The quality of material provided is important to ensure that the management of the facilities in PI is properly handled. In this case, respondents agree that the low quality of materials provided is a constraint in managing the facilities in PIs. Respondents agreed that human resources or expertise is one of the barriers to managing the facilities in PI. This factor was ranked sixth with a mean score of 4.10 out of 5.00. Consequently, when the budget for this is low, the allocation of expertise and staff will be reduced.

Lastly, the age of the buildings was ranked last with a total mean score of 3.52. Therefore, it can be said that most respondents agree that this factor also contributes to the barriers to implementing proper facilities management in PIs. As mentioned by Mydin & Ahmad (2014), PIs in Malaysia can mostly be categorised as old buildings, although some of them have been partially or fully renovated. Thus, there is no doubt that the institution needs upgrading for better quality education facilities.

It can be concluded that all barriers identified in managing the facilities in PI can hinder effective FM in PI. The discussion highlights the multi-layered nature of barriers to practising the FM in PIs, with fund allocation, policies and procedures, and space and layout being the most critical issues. Addressing these barriers requires a holistic approach that includes securing stable funding, standardising policies, optimising space utilisation, enhancing maintenance management, investing in quality equipment, and improving human resources. By tackling these challenges, PIs can significantly improve their FM practices, ultimately leading to a more conducive and sustainable learning environment.

Table 1. Barriers in Managing Facilities Provided PI (Mean & Agreement Level)

Barriers of FM Implementation in PI	Scale of Agreement (Frequency)					Average Mean	Rank
	1	2	3	4	5		
Fund allocation	0	0	2	20	123	4.83	1
	0%	0%	1%	14%	85%		
Policies and procedures	0	3	6	53	83	4.49	2

	0%	2%	4%	37%	57%		
Space and layout of Pondok	0	0	7	67	71	4.44	3
	0%	0%	5%	46%	49%		
Maintenance management planning and procedure	0	3	7	79	56	4.30	4
	0%	2%	5%	54%	39%		
Quality of equipment	4	3	5	81	52	4.20	5
	3%	2%	3%	56%	36%		
Expertise and staff (Human resource)	0	0	12	107	26	4.10	6
	0%	0%	8%	74%	18%		
Building age	15	22	9	71	28	3.52	7
	10%	15%	6%	49%	19%		

Source: Authors (2025)

Effective FM Planning

To address objective two, namely Effective FM Planning, Table 2 presents the detailed results from the legislative and procedural perspectives based on respondents' views and their level of agreement. There are four sub-constructs presented in the table below.

Table 2. Legislative and Procedures Perspective

Effective Facilities Management Planning		Scale of Agreement (Frequency)					Mean	Rank	Level of Agreement
A	Legislative and Procedures Perspective (LPP)	1	2	3	4	5			
1	Provide clear guidelines to PI as per other institution	2	3	6	27	107	4.61	1	Strongly Agree
		1%	2%	4%	19%	74%			
2	Centralised all the PI and put under one ministry that control all the development, syllabus, management, etc.	3	5	11	64	62	4.22	2	Agree
		2%	3%	8%	44%	43%			
3	Ensure all the funds are well allocated in national budget which is presented annually in parliament and ensure the fund allocated is directly distributed to the PI	5	3	13	69	55	4.14	3	Agree
		3%	2%	9%	48%	38%			
4	Enforcement of law which require PI to follow guidelines on basic facilities should be provided as per government's daily school	5	9	15	86	30	3.88	4	Agree
		3%	6%	10%	59%	21%			

Source: Authors (2025)

There are four sub-construct groups under government or authority bodies. Based on the table, most of the respondents agree that the authority body should provide clear guidelines to PIs, similar to those provided to other institutions. This suggestion was strongly agreed upon by respondents, ranking first with a total mean score of 4.61. This is because there are no clear guidelines provided by the authority to PIs. In

addition, the authority body should also centralise all the development of PIs, similar to public schools. This factor was ranked second with a total mean score of 4.22.

Furthermore, the authority needs to ensure that the fund is well allocated in the national budget, which is presented annually in Parliament, and that these funds are directly distributed to PIs. By doing this, PIs would have an annual fund that can be used to manage and maintain the facilities within the Pondok itself. This factor was ranked third with a total mean score of 4.14.

Lastly, another way to ensure that facilities are well managed in PIs is for the authority body to enforce a law requiring PIs to follow guidelines on basic facilities that should be provided in the institutions. This will ensure that all the students and teachers have a better experience in the learning and teaching processes at these institutions. This factor was ranked fourth with a total mean score of 3.88.

Table 3 shows the detailed results for management and operational perspectives based on respondents' level of agreement. There are three sub-constructs for this group, which are represented in the table below.

Table 3. Management and Operational Perspective

B .	Effective Facilities Management Planning Management and Operational Perspective (MaPP)	Scale of Agreement (Frequency)					Mean	Rank	Level of Agreement
		1	2	3	4	5			
1	Ensure to follow guidelines provided by the government to enhance the development and achievements of the Pondok	2	2	1	47	93	4.57	1	Strongly Agree
		1 %	1%	1%	32%	64%			
2	Promote and organise any activities that can generate income which can assist the development and maintenance of the Pondok	4	9	13	64	55	4.08	2	Agree
		3 %	6%	9%	44%	38%			
3	Establish a system or framework to checking the facilities regularly to prevent severe damages	3	16	19	59	48	3.92	3	Agree
		2 %	11%	13%	41%	33%			

Note: 1.00 Average Mean < 1.50 = Strongly Disagree, 1.50 ≤ Average Mean < 2.50 = Disagree, 2.50 ≤ Average Mean < 3.50 = Neutral, 3.50 ≤ Average Mean < 4.50 = Agree, 4.50 ≤ Average Mean < 5.00 = Strongly Agree

Source: Authors (2025)

There are three sub-constructs themed under the roles of PI or operators. According to the table, with a total mean score of 4.57, the highest ranked sub-construct is that the operator should ensure they follow the guidelines provided by the government to enhance the development and achievements of the PIs. Most respondents agree that PI itself should follow the guidelines that have been outlined by the authority body to ensure that the development of the Pondok meets the safety requirements designed by the authorities. Thus, it is important to follow the guidelines provided to ensure the safety of the occupants and facilities in the Pondok.

In addition, to ensure that the facilities in the Pondok are well planned, the institutions should generate income by promoting or organising activities that may attract people to join the events, which can assist the Pondok to generate revenue. By doing this, they can indirectly generate their own income to use for maintaining the facilities in the Pondok as needed. This approach is ranked second with a total mean score of 4.08.

Moreover, to ensure that the facilities in this institution are well-planned, with a mean score of 3.92, the Pondok operator should establish a system or framework for regularly checking the facilities to prevent severe damage. A checklist can be created to classify the facilities into several groups based on maintenance requirements. This is the proper way to avoid serious damage to the facilities. By doing this, the operator can manage the budget more effectively and may save costs by preventing major damage.

Table 4 shows the detailed results from the end user perspective based on the respondents' level of agreement. There are four sub-constructs for this group which are represented in the table below.

Table 4. End User Perspective

Effective Facilities Management Concept in PI		Scale of Agreement (Frequency)					Mean	Rank	Level of Agreement
C.	End User Perspective (EUP)	1	2	3	4	5			
1	Supporting fundraising initiatives project by participating in fundraising initiatives which aimed at improving and maintaining school facilities	4	7	16	35	83	4.28	1	Agree
		3%	5%	11%	24%	57%			
2	Collaborate with the maintenance staff and expertise to implement the preventive maintenance measures for school facilities and technology	4	9	22	76	34	3.88	2	Agree
		3%	6%	15%	52%	23%			
3	Thought on the importance of respecting school property throughout a specific event organised by the school	11	17	26	40	51	3.71	1	Agree
		8%	12%	18%	28%	35%			
4	Contribute to sustainability initiative by participating in an event organised by the school such as environment awareness and responsibility.	24	18	31	29	43	3.34	2	Neutral
		17%	12%	21%	20%	30%			

Source: Authors (2025)

There are three sub-constructs themed under EUP. Most respondents agree that end users should also play their roles to ensure the effectiveness of facilities management in Pondok schools, which contributes to the performance of the students and teachers in terms of teaching and learning process. With a total mean score of 4.28 and ranked first, most of the respondents agree that parents and teacher association (PTA) should support fundraising initiative by participating in projects aimed at improving and maintaining school facilities. By doing this, the institution can manage the funds and use them for the development of the Pondok as well as maintain the facilities when necessary. Thus, it is important for the PTA to contribute since the PIs are not fully supported by the government. On the other hand, with a total mean score of 3.88 and rank second, most of the respondents agree that the PTA should collaborate with the maintenance staff and experts to implement preventive maintenance measures for school facilities and technology. There should be checks and balances between PIs and the PTA. Additionally, when a team is established, it will indirectly lead to monitoring the facilities in the Pondok, which might reduce the serious damages to the facilities since there will be a team overseeing the lifespan, quality and specifications of the facilities used and to be used in the Pondok. Hence, this seems to be a better way to improve facilities management in PIs.

In addition to the roles mentioned above, students also need to play their part to ensure that the facilities in the Pondok are well functioning and maintained in good condition. Students should be taught the importance of respecting school property through specific events organised by the school so that they are discouraged from vandalism, graffiti and any other actions that may damage the school facilities. If students breach the rules after implementation, they can be disciplined to prevent repetition of the same actions. By

implementing this, it is expected that disciplinary cases among the students will decrease, and their appreciation for their study environment will increase. Additionally, students should contribute to sustainability initiatives by participating in events organised by the school such as environmental awareness and responsibility campaigns. By doing so, they can contribute their ideas and suggestions for enhancing the school environment during student council meetings or other forums. By involving students in the process of facilities management, schools can foster a culture of responsibility, environmental awareness, and pride in maintaining a positive learning environment. This not only contributes to the well-being of the school but also helps students develop valuable life skills. Thus, end users play important roles in contributing to the effectiveness of facilities management in PIs.

Table 5. Summary of Effective FM in Pondok Institution

Effective Facilities Management		Mean	Average Mean	Ranking	Level of Agreement
A. Legislative and Procedures Perspective					
1	Provide clear guidelines to PI as per other institution	4.61			
2	Centralised all the PI and put under one ministry that control all the development, syllabus, management, etc.	4.22			
3	Ensure all the funds are well allocated in national budget which is presented annually in parliament and ensure the fund allocated is directly distributed to the PI	4.14	4.21	1	Agree
4	Enforcement of law which require PI to follow guidelines on basic facilities should be provided as per government's daily school	3.88			
B. Management and Operational Perspective					
1	Ensure to follow guidelines provided by the government to enhance the development and achievements of the Pondok	4.57			
2	Promote and organise any activities that can generate income which can assist the development and maintenance of the Pondok	4.08	4.19	2	Agree
3	Establish a system or framework to checking the facilities regularly to prevent severe damages	3.92			
C. End User Perspective					
1	Supporting fundraising initiatives project by participating in fundraising initiatives which aimed at improving and maintaining school facilities	4.28			
2	Collaborate with the maintenance staff and expertise to implement the preventive maintenance measures for school facilities and technology	3.88			
3	Thought on the importance of respecting school property throughout a specific event organised by the school	3.71	3.80	3	Agree
4	Contribute to sustainability initiative by participating in an event organised by the school such as environment awareness.	3.34			

Source: Authors, 2025

Based on the table above, legislative and procedural measures are ranked first with a total average mean score of 4.21. The government plays an important role in ensuring that the facilities provided in the PIs are sufficient and safe for use by the occupants of the institutions. The main role of a government agency is to provide clear guidelines to all PIs on the development and operation of the Pondok. In addition, enforcement of laws that require these institutions to follow the provided guidelines also seems to be the best approach, so that all the PIs will adhere to a unified set of guidelines. By doing this, all the Pondok will be standardised in every aspect, and it will ease the authorities to manage these institutions. According to Zurainan et al.

(2021), the government also needs to provide regulatory framework, such as the implementation of building codes and guidelines, to ensure that the school facilities are designed and constructed to meet the appropriate standards.

Besides government agencies, management and operational teams also need to play their roles to ensure the facilities in PIs are well managed. Based on the table, this aspect is ranked second, with a total average mean score of 4.19. Under this category, there are three proposed measures; firstly, Pondok operators should ensure that they follow the guidelines provided by the government regarding their development, facilities, operation, syllabus and other aspects to ensure these institutions are on par with other government schools. Therefore, by taking a proactive and collaborative approach, a management team can contribute significantly to the effective management of school facilities, creating a safe and conducive learning environment for students and staff (Suleman & Hussain, 2014).

Finally, end users, comprising of the PTA and students, also need to play their roles to ensure proper management of facilities in PIs. This factor is ranked third, with a total average mean score of 3.80. There are two roles of the PTA suggested by the researcher; firstly, to support fundraising initiatives by participating in projects aimed at improving and maintaining school facilities. This can be done by forming a team with a complete organisation structure, consisting of a leader and other members to audit the facilities in Pondok determining if any require urgent replacement or periodic maintenance, and ensuring that all the facilities have been inspected and verified by the team (Mohd Zain, 2019). Other than that, students can also contribute to sustainability initiatives by participating in events organised by the school such as environmental awareness and responsibility activities (Suleman & Hussain, 2014).

CONCLUSION

According to the data analysed, there are seven barriers that significantly hinder the implementation of effective FM in PIs. Fund allocation is the main obstacle faced by most of the PIs in Malaysia. This is due to the limited sources of funds available to maintain or provide good facilities in PIs. The government needs to standardise the policies and procedures to provide clear guidelines to the PIs, which includes all matters pertaining to the law on enforcing proper planning. To ensure effective FM practice, legislative bodies and procedures involving the government or authorities should play their roles. PIs themselves should also have a role in terms of following the guidelines provided by the government, organising programs that can contribute to the income of the institution as well as establishing a framework for facilities maintenance. In addition, end users also need to play their roles which include supporting fundraising initiatives by participating in projects which are aimed at improving and maintaining school facilities and collaborating with the maintenance staff and experts to implement preventive maintenance measures for school facilities and technology.

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CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial, or financial conflicts and declare the absence of any conflicting interests

AUTHORS' CONTRIBUTIONS

Muhammad Shahrol Hafiz Ibrahim carried out the data collection and conceptualised the central research idea. Yuhainis Abdul Talib did the data analysis & findings & anchored the review, and revisions and approved the submission. Nor Aini Salleh wrote introduction and literature review. as well as designed the research and supervised the research progress. Mariah Awang wrote the methodology & conclusion. Pangiran Shafiq Pangiran Julaini revised the article and conceptualised the central research idea.

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