

Santri and the Digital Divide (The Upheaval of *Pesantren* Over Technological Developments in Cultural Lag Perspective)

Try Heni Aprilia⁽¹⁾, Sufirmansyah⁽²⁾

Universitas Islam Negeri Syekh Wasil Kediri,
Jalan Sunan Ampel No. 7, Kelurahan Ngronggo, Kecamatan Kota, Kota Kediri, Jawa
Timur, Indonesia

Email: ¹tryheni02@iainkediri.ac.id, ²imansyah28@iainkediri.ac.id

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Abstract: This paper focuses on the challenges and responses of pesantren in the information age. It starts from the assumption of pesantren as a subculture that filters out various external elements that seem more dominant to ensure the integrity of Islam. This character is the reason why pesantren can exist for a very long time. The purpose of this study was to determine the extent of the digital divide among santri at Salafiyah Islamic Boarding School. The method used is a mixed method with a Sequential Explanatory approach. The sample was taken from 100 santri at Al-Falah Ploso Islamic Boarding School, selected using a systematic random sampling technique. Data collection was carried out using questionnaires and interviews. The results of this study show that the digital divide experienced by santri is a gap in the stage of physical and material access, santri skills in operating gadgets, and the use of the gadgets themselves. Pesantren today also experiences cultural backwardness. This can be seen from the complexity of pesantren responses to the internet and the flow of digitalisation of pesantren that is not going well.

Kata Kunci:

Kesenjangan Digital, Pesantren,
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Corresponding Author:

Name:
Try Heni Aprilia
Email:
tryheni02@iainkediri.ac.id

Abstrak: Tulisan ini berfokus pada tantangan dan respon pesantren di era informasi. Dimulai dari asumsi pesantren sebagai subkultur yang menyaring berbagai unsur luar yang tampak lebih dominan untuk menjamin keutuhan Islam. Karakter inilah yang menjadi alasan mengapa pesantren dapat bertahan dalam kurun waktu yang sangat lama. Tujuan dari penelitian ini adalah untuk mengetahui sejauh mana kesenjangan digital di kalangan santri di Pondok Pesantren Salafiyah. Metode yang digunakan adalah metode campuran dengan pendekatan Sequential Explanatory. Sampel diambil dari 100 santri di Pondok Pesantren Al-Falah Ploso yang dipilih dengan menggunakan

teknik systematic random sampling. Pengumpulan data dilakukan dengan menggunakan kuesioner dan wawancara. Hasil penelitian ini menunjukkan bahwa kesenjangan digital yang dialami santri adalah kesenjangan pada tahap akses fisik dan materi, keterampilan santri dalam mengoperasikan gawai, dan penggunaan gawai itu sendiri. Pesantren saat ini juga mengalami keterbelakangan budaya. Hal ini terlihat dari kompleksitas respon pesantren terhadap internet dan arus digitalisasi pesantren yang tidak berjalan dengan baik.

INTRODUCTION

The rapid development of information technology has touched almost all aspects of people's lives. Although it brings various positive impacts, this development also raises new problems that are quite serious, one of which is the digital divide. This gap arises due to unequal access to information technology between groups of people who can reach and utilise the

technology and groups who do not have the same access. One group that has the potential to experience this digital divide is the santri in Salafiyah pesantren, who have limited access to information technology due to the traditional education system and environment.

The issue of the digital divide was first raised by Larry Irving Jr., who highlighted the inequality in access to information between high-income groups who could afford information technology devices and low-income groups who could not (Banihashemi & Rejaei, 2015). Over time, the concept evolved. Van Dijk added that the digital divide is not only related to device ownership, but also includes motivation, physical and material access, skills, and technology utilization (Dijk, J. van, 2008). In the context of Salafiyah pesantren, this limited access is not only caused by economic and geographical factors, but also by the traditional curriculum structure and teaching methods, as well as the pesantren culture that is closed to the outside world.

The Salafiyah Islamic Boarding School has a curriculum that is determined by the caregivers of the Islamic boarding school, with the literature or guidebooks used in the form of the yellow book and the Qur'an (Satrio & Sukmawati, 2025). The teaching and learning method applied uses a traditional knowledge transfer system, where the teacher or commonly called the Kyai, reads and explains then the students take notes on the explanation delivered by the Kyai (Wahid, 2007). Activities at the Salafiyah Islamic Boarding School are filled with activities that are thick with the Islamic religion, where in one day, students are scheduled to take part in several activities to study books that have been determined, and also recite the Qur'an (Maryam & Yasin, 2025). The leadership system at the Salafiyah Islamic Boarding School is hereditary in family members, where after the caregiver of the Islamic Boarding School dies, it will be continued by the dhuriyah (Mujiyatun & Haris, 2025).

Previous research has shown that factors such as age, education level, and social environment strongly influence an individual's ability to use information technology (Robbi & Syafi'uddin, 2025). However, research on the digital divide in the context of Salafiyah pesantren is still very limited (Aprilia & Munifah, 2022). This indicates a research gap that is important to explore further. Pesantren, as a subculture that has its value system, way of life, and hierarchy of power, is now faced with a big challenge when it comes to adapting to the digital era (Aprilia dkk., 2022). On the one hand, pesantrens must maintain their traditional values and functions as moral guardians and disseminators of Islamic teachings; on the other hand, they are required to be able to adapt to the global information flow that enters through digital technology (Munifah dkk., 2025).

This paper departs from the general view that is still strong today that pesantren is a subculture in the sense that it is a unique phenomenon, autonomous, and tends to be separated from the outside world. As stated by Abdurrahman Wahid or Gus Dur, the labeling of pesantren as a subculture cannot be separated from the existence of three basic elements inherent in the life of a pesantren, namely: (1) the way of life adopted, (2) the view of life and values that are followed, and (3) an internal hierarchy of power that is completely adhered to (Juliani dkk., 2025).

The view that pesantren is a subculture is also reinforced by Said Aqil Siraj. According to him, there are two reasons why the presence of pesantren is considered unique: first, pesantren exists to respond to the situation and condition of a society that is faced with moral issues, which can be called social change. Second, the establishment of pesantren is to spread the teachings of the universality of Islam to all corners of the archipelago. In other words, Islamic boarding schools are referred to as "cultural brokers" and also function as "cultural filters" that filter out various external elements that appear to be more dominant to ensure the integrity of Islam (Arifin & Fauzi, 2024). This kind of character is the reason why pesantren can exist for a very long time. However, this character does not necessarily make the pesantren static. Throughout its history, Islamic boarding schools have had a dynamism that is adaptive to progress outside it, as long as it does not conflict with the way of life and values that are believed to be (Rodhiyana, 2025). In Hamdani's expression, in responding to the outside world, Islamic boarding schools tend to go their own way; some are fast, but some are slow. A fast response is usually shown by modern pesantren (khalafiyah), while a slow response is usually shown by traditional pesantren (salafiyah) (Hamdani & Baharuddin, 2025).

The predicates are “subculture”, “cultural broker”, and at the same time “cultural filter” above is interesting when brought to the context of the current information age, where Islamic boarding schools have started to meet the internet (Agustina dkk., 2025). Along with the massive technological acceleration over the last three decades, today’s world community has transformed into what social science experts call the “information society” or “digital society,” which is a terminology development. Of “post-industrial society”. Referring to Alvin Toffler’s futuristic predictions, the society he calls the “super post-industrial society” is a manifestation of the third wave of human civilization development, namely from an agrarian society, an industrial society, and then a post-industrial society (information society); a prediction that later came true (Toffler, A., 1990).

In encountering the internet, Islamic boarding schools face serious challenges in at least two respects. First, the internet currently represents what Marshal McLuhan calls a “global village”, where the world of public electronics at that time, radio and television, has been narrowed to the point of a big village (McLuhan, M., 1992). With the internet, distance and boundaries no longer work. Everyone who accesses the internet can instantly find out what is happening and has happened in other parts of the world, and communicate with anyone anywhere with ease. At this point, when pesantren are familiar with the internet, the title of “subculture” that it bears faces a serious test, because at that time, pesantren had become part of the “global village”.

Second, the massive flow of information presented by the internet, especially when it is driven by digital media capitalization, means that to borrow the words of AG. Eka Wenats Wuryanta, information received by the community or everyone can be a “flood” of information. On the one hand, this condition is beneficial for some people who are hungry for information to can get the information they need. However, on the other hand, exposure to such information can create an overload situation for the entire process of information received. The information society paradox arose, namely, a situation where information that was like a “flood” actually made it difficult for them to digest the information they received, while at the same time building a better social and cultural system (Azizah, 2024). At this point, when they are familiar with the internet, Islamic boarding schools inevitably face this situation, so their predicate as “cultural brokers and filters” so far has been seriously tested.

Observing the pesantren’s response to the above exam is certainly very interesting. In this context, Islamic boarding schools are facing a problematic situation between fulfilling the need to absorb information from the outside which is getting bigger and bigger, on the one hand, and a commitment to maintain the institutional functions and values that have been embraced so far, on the other hand, pesantren today, borrow Peter Mandaville said, “We are in the current of digitalization of Islam which has become a global phenomenon in the Islamic world today, where the boundaries of religious knowledge have changed in such a way” (Akbari dkk., 2024). Photographing the pesantren’s response is not so easy, because the dynamics of religious thought and institutional development in the pesantren world are quite complex. However, this dynamic can be photographed, although it may not be satisfactory, using the perspective of the cultural lag, which was first proposed by William F. Ogburn, namely a situation where the world of non-material culture is unable to keep up with the pace of world development. Material culture, where the consequences that arise are cultural shock and many social problems, such as the depletion of social solidarity and the emergence of social conflicts (Arifin & Fauzi, 2024).

The idea of reforming Islamic boarding schools in Indonesia was introduced by modernists with the idea of a Dutch model school in 1924. The reform at that time was opposed by many conservatives (kyais) because the school model could hit the deepest roots of the Kyais’ power. But the spirit of the modernists could not be contained; they cared in their program urged the need for teaching modern subjects in modern ways, they incorporated Islam as a modern subject and made it an integral part of the school curriculum (Ishak dkk., 2024).

Although many Islamic boarding schools have made fundamental changes, Zamaksyari Dhofier assesses that these changes are still very limited. According to him, there are two main reasons for this, namely, first, the Kyai still maintain the basic aims of pesantren education,

namely that education is aimed at defending and spreading Islam. Second, they do not yet have staff according to the need for renewal to teach general knowledge branches (Nurhakki dkk., 2024). Some modern pesantren have started to respond to this challenge by reforming their curriculum and opening up access to digital technology (Rosyidah, 2024). However, the reform is still limited to Khalafiyah pesantren, while Salafiyah pesantren tends to be slow in responding to changes. This is due to the strong attachment to traditional values as well as limited human resources capable of managing such changes (Yanti dkk., 2024). Therefore, a new approach is needed that not only focuses on providing technological devices but also pays attention to motivational factors, skills, and strategies for utilising technology contextually according to the characteristics of Salafiyah pesantren (Putra dkk., 2024).

This research offers a novel solution by developing a contextualised approach based on pesantren culture in bridging the digital divide (Nazaruddin dkk., 2024). This approach not only aims to improve access to technology but also to build the digital capacity of santri through structured training that is aligned with Islamic values and pesantren culture (Wahidah, 2024). The urgency of this research lies in the effort to maintain the existence of pesantren in the digital era while improving the quality of pesantren education that is inclusive of information technology (Zainuddin dkk., 2024). This research also contributes to expanding the study of the digital divide by presenting the unique context of Salafiyah pesantren that has not been widely researched (Zaimina, 2024). Thus, the purpose of this study is to identify and analyse the factors that cause the digital divide in Salafiyah pesantren and formulate appropriate strategies to reduce the divide through a value-based approach and local pesantren culture.

METHOD

The object of this research is the Salafiyah Islamic Boarding School Al-Falah Ploso Kediri. The aims of this study are 1) To describe the digital divide among Santri, by knowing the most dominant aspects of the four aspects which include aspects of motivation, physical and material access, access and utilization skills; 2) To find out the response of pesantren, especially Salafiyah, in welcoming the era of digital technology from the perspective of cultural lag. The research was conducted using a mixed-methods method with a Sequential Explanatory approach (Cresswell, 2018). This research was conducted in Pesantren Al-Falah Ploso with a sample of 100 santri who were selected using a systematic random sampling technique. Data collection was done by using questionnaires and interviews. To ensure the validity of the qualitative data, the triangulation technique was used (Patton, 2019). The quantitative data were analyzed using descriptive and inferential statistical analysis, while the qualitative data were analyzed using Miles and Huberman's interactive model, which includes data reduction, data display, and conclusion drawing/verification (Miles, M. B., 1994).

RESULTS AND DISCUSSION

Digital Divide among Santri of the Salafiyah Islamic Boarding School (Al-Falah Ploso)

The results of the initial observations made by the researchers showed that not all students at the Salafiyah Islamic Boarding School did not utilized information technology. The boarding school administrator explained that the time for the use of information technology was limited, namely not allowed to use information technology freely while in the boarding school environment, inside the boarding school only a cellphone was facilitated which could be used by students to contact their families for some reason, for example, when sick, or when students need something. So, the existence of this cellphone can only be used by students if it is in an urgent situation.

These cellphones are usually carried by the boarding school administrators, or some are directly brought by the boarding school caregivers. In addition, the students can take advantage of information technology when there are families who visit by bringing information technology devices such as cellphones or smartphones, this can be seen when researchers make observations that there are several students who are being visited by their families, and are seen using cellphones. Meanwhile, when an interview was conducted with one of the students, it was found

that when they were outside the boarding school environment, the students were freer to use information technology, which usually happened when they had long holidays and were at their respective homes.

Based on the data that has been obtained by researchers from distributing questionnaires to respondents and the results of observations at the research site, these data have been processed and analyzed using statistics and then presented in tabular form to answer the research hypothesis. Van Dijk argues that motivation is an individual's desire or willingness to connect with information technology. The desire or willingness to connect with information technology is influenced by two factors, namely social factors and psychological factors (Dijk, J. van, 2008). He also explained that social factors lead to individual disinterest in information technology. They assume that they do not need information technology in their lives, and do not have the time or opportunity to use information technology.

One of the regulations applied in Islamic boarding schools is the regulation regarding the limitation of time for santri access to information technology while inside the Islamic boarding school, and the density of activities in Islamic boarding schools also causes students not to have much time to be able to use gadgets. However, the limited access time possessed by students does not affect their motivation of students to use gadgets. This can be seen in Table 1, where as many as 94 students, or 94% of students, still use gadgets when outside the Islamic boarding school. In addition, the results of probing carried out with respondents showed that the access restrictions carried out by the administrators of the Islamic boarding school did not reduce the motivation of students in using gadgets, students who also participated in formal school activities outside the Islamic boarding school even entrusted their gadgets to their school friends so that they could be used when they were there at school.

Table 1. Use of Gadgets outside Islamic Boarding School

Use of Gadgets outside Islamic Boarding School	F	%
Yes	94	94.00
No	6	6.00
Total	100	100

Psychological factors are prominent factors in individuals in their desire to connect with information technology, Technophobia is one of the prominent factors; technophobia is a feeling of anxiety about computers, such as feelings of discomfort, stress, or fear when dealing with computers, and distrust of computers. The advantages of using information technology (Dijk, 2008, p. 6). The data in the field shows that students still feel the so-called digital gap in the motivational aspect, especially in psychological factors. This can be seen in Table 2, where students feel dissatisfied with the gadgets they currently have, which is 64% of students, only occasionally. Feel satisfied with the gadgets they currently have.

Table 2. Student Satisfaction with Gadgets Currently Owned

Student Satisfaction	F	%
No	22	22
Sometimes	64	64
Often	4	4
Always	10	10
Total	100	100

In addition, in Table 3, it can be seen that the reason students are dissatisfied with the gadgets they have is that the gadget is considered too outdated or so-called old school, where there are as many as 53% of respondents who say that the gadget, they currently have is too old.

Table 3. Reasons why students are not satisfied with the information technology they currently have

Student Reason	F	%
Too far	53	53
Can't Help Activities	17	17

Difficult to operate	20	20
Total	90	90

The gap in physical and material access to information technology is a problem of access gaps that occur based on the level of distribution of resources. The distribution of these resources includes the availability of hardware and software. More broadly, Fuch and Horak added that network availability is also one of the problems that cause the digital divide. The equitable distribution of these resources is one of the factors that causes the digital divide, where what is common is that current infrastructure developments are still concentrated in urban areas.

Based on the data obtained in the field, it is known that the availability of hardware and software is not a serious problem with the digital divide as presented in table 4, where as many as 77 respondents, or 77% of respondents already have an Android smartphone which is currently a trend. in society. In addition, based on the results of probing, it is also known that there are respondents who have more than one gadget where each gadget has its function, and even some respondents have obtained the gadget by buying it with their own pocket money as presented in table 4, where as many as 28 respondents or 28% stated that they got gadgets by buying them themselves, while as many as 61 respondents or 61% of respondents had gadgets from their parents.

The data above shows that the gap in hardware and software problems is no longer a crucial issue. In addition, although the boarding school administrators do not allow students to bring their gadgets or simply limit the time they can be used, the administrators also provide special facilities such as ordinary cellphones and computers/laptops that can be used by students, as presented in table 4, where all respondents or 100% stated that boarding school administrators provide information technology facilities that can be used when needed. The information technology facilities provided by this Islamic boarding school in the form of ordinary mobile phones and laptops, as many as 100 respondents and as many as 53 respondents, or 53% of respondents, stated that they were given facilities in the form of laptops by the boarding school administrators. However, the facilities provided are limited to 1 unit to be used by all students, and cellphones and laptops are also provided by the boarding school administrator.

Table 4. Provision of Special Facilities for Santri

Provision of Special Facilities	F	%
Yess	100	100
No	0	0
Total	100	100

However, the availability of hardware and software does not make the physical and material access gap disappear. This is because the availability of the existing network in the Islamic boarding school environment is not fully adequate, as explained above that the gap in physical and material access problems is not only seen based on the distribution of hardware and software but also includes the network, as presented in Table 5 were as many as 67 respondents or as many as 67% stated that the provider network in the Islamic boarding school environment was still unstable. This is reinforced by the results of probing conducted with respondents, as it is known that the provider network used by respondents will experience errors when it rains or there is a power outage. Meanwhile, to get a better provider network, respondents have to spend more money to buy service cards from other providers, which are more expensive. This is as explained by Van Dijk, that the high cost of information technology is also one of the factors that cause an increase in access problems in general.

Table 5. Provider Networks at Current Islamic Boarding Schools

Current Provider Network	F	%
Yess	33	33
No	67	67
Total	100	100

Access skills are the ability to manage hardware and software, and a lack of skills or the inability to operate information technology is one of the causes of the digital divide, as explained by Schmidt and Stork, that lack of skills is one of the most often encountered with inequality. Digital. Ownership of all types of information technology is not enough to cover the problem of the digital divide if it is not balanced with the skills or abilities to operate the information technology (Tustin, 2012, p. 5). This explains that ownership of information technology alone is not enough to address the problem of the digital divide. Van Dijk divides the problem of access skills in the digital divide into two, namely strategic skills and information skills.

Strategic skills are defined as the capacity to use computers and networks as a means for specific purposes and general purposes. In the definition above, it can be said that strategic skills are the individual's ability to physically operate information technology. Skills or abilities in operating information technology are needed so that people can take full advantage of information technology.

Based on the data in the field presented in table 6, it can be seen that the level of respondent's ability to use information technology that is around them is at the introduction stage, namely 53 respondents or 53% and learning about existing information technology and the stage is limited to the operation of several information technologies. There are around 35 respondents, or 35%. This shows that the respondent's ability to operate information technology has not been maximized, so it can be said that respondents, in this case, students, are still experiencing a digital divide in terms of the ability to operate information technology.

Table 6. Students' Ability in Using Gadgets

Student Ability	F	%
Not capable	5	5
Still in the Introduction and Learning Stage	53	53
Limited in Operation of some IT	35	35
Able to operate all IT without Constraints	7	7
Total	100	100

Information skills are skills to search, select, and process information on computers and networks. Information skills are closely related to the digital divide, as explained by the American Association of College and Research Libraries. Information skills are a framework for understanding the activities of searching, selecting, and processing information, where these activities cannot be separated from information technology.

Based on the findings of the data in the field as presented in Table 3.37, as many as 60 respondents, or 60% of respondents, have been able to find information through search engines. However, this ability is not directly proportional to the respondent's knowledge of the ability to choose information, such as the data presented in Table 7 regarding digital information sources that are often used by respondents, where there are 57% of respondents use online news as a source of information. 45% of respondents use information sources in the form of blogs, and are still unsure about the accuracy of the information in them. The low ability of respondents to choose information is also reinforced by the results of probing which states that respondents do not pay attention to the type or website address when meeting their information needs, respondents claim to choose information randomly whose content is under what is needed without looking back at the type of digital information source used. This shows the respondent's lack of ability in choosing information, where The Libraries of Albany University, which is one of the College Libraries in New York, explains that to see the accuracy of the information, several things need to be considered, including looking at the competence of the author and the site address or link.

Table 7. Sources of Digital Information Used by Santri

Digital Information Source	Yess		No			Total
	F	%	F	%	F	
Blogger	45	45	47	47	92	100
Online News	57	57	35	35	92	100
Institutional Website	31	31	61	61	92	100
Journal	5	5	87	87	92	100

The use of information technology is also something that must be considered in measuring the digital divide. Differences in the use of information technology cause a digital divide in society. The first difference in the use of information technology can be seen in the time used to utilize information technology, as said by van Dijk that the first factor used to measure the digital divide in the aspect of utilization is the duration of time used to access information technology, the duration of time used to utilizing information technology is influenced by the level of public education, people with low education use information technology longer than people with higher education.

Table 8. Education Level and Duration of Information Technology Utilization

Duration	Level of education								Total	
	Primary School		Junior High School		Senior High School		College			
	F	%	F	%	F	%	F	%	F	%
>5 Hours	1	50	4	21.1	9	18.4	2	6.7	16	16
1-5 Hours	1	50	10	52.6	26	53.1	23	76.7	60	60
<1 Hours	0	0	5	26.3	14	28.6	5	16.7	24	24
Total	2	100	19	100	49	100	30	100	100	100

Based on the results of the cross-tabulation between the duration of the use of information technology and the level of education in table 8, it is known that the level of education does not affect the duration of time used by respondents in utilizing information technology, where the duration of the use of information technology at all levels of education, in general, is 1- 5 hours, which is 60% of the respondents.

The gap in the use of information technology can also be seen based on the activities carried out by respondents when using information technology. This is as explained by Van Dijk, people with low education tend to use information technology to carry out activities that are fun or entertainment, while people with higher education tend to use information technology for serious things.

The data obtained in the field, as presented in Table 3.40, shows that most of the respondents, as many as 81%, use information technologies to access social media. While in Table 3.45, it is known that respondents use social media for various activities such as making status updates 67%, seeking the latest information by 70%, chatting with friends 70%, and doing online shopping activities 26%.

Table 9: Level of Education and Activities When Utilizing Information Technology

Activities performed	Level of Education							
	Primary School		Junior High School		Senior High School		College	
	F	%	F	%	F	%	F	%
Browsing	1	1.8	13	23.2	28	50	14	25
Chatting	2	2.7	14	19.2	39	53.4	18	24.7
Social media	2	2.5	18	22.2	41	50.6	20	24.7
Online Game	1	3.7	8	29.6	13	48.1	5	18.5

Based on Table 4.4, it is known that the level of education does not affect the use of information technology. This is not under the opinion expressed by Van Dijk that there are differences in the use of information technology based on education level, where respondents with low levels of education tend to use information technology for fun things, and people with higher education tend to use information technology. For more serious matters. This opinion is proven in Table 4.4 above. Where the higher the education level of the respondent, the activities carried out when using gadgets for pleasure things are lower, this can be seen in table 4.4 where respondents with an elementary school education level are more likely to access social media by 3.7%, while respondents with an elementary school education level are 3.7% more likely to access social media. Higher education tends to use gadgets for browsing activities, 25%.

Symptoms of Cultural Lag

The complexity of the pesantren's response to the internet as described above can be understood as a symptom of a cultural lag. According to William F. Ogburn, who coined this theory, technology is the main engine of progress, but always clashes with social responses to it. Based on the basic assumption of middle technological determinism, Ogburn states that cultural inequality occurs at the final stage of the four stages of technological development, namely: (1) invention, which is the stage where technology was first created, (2) accumulation (accumulation), namely the process of technological growth and development, (3) diffusion, namely the process of exchanging and struggling ideas around technology which in turn gives rise to new findings, and (4) adjustment, namely the stage in which aspects of the non-material aspects of culture respond to the findings of these technologies. This delay in non-material cultural responses has led to the emergence of cultural gaps (Ritzer, G., 2011).

Ogburn's description is appropriate to describe the reality of the internet in Islamic boarding schools and the social response to it. When Islamic boarding schools met the internet, or more precisely, when the internet began to enter the world of pesantren, the problem of adjustment between pesantren and the internet came to the fore (Ilyas & Sukari, 2024). On the one hand, the internet as part of the global capitalist industry has an interest in exploring new lands and the hegemony of the world. In this case, Indonesia, including Islamic boarding schools, is considered a very promising market, considering that its people tend to be easily enchanted by Western civilization and things that are considered modern (Solich & Ni'am, 2023). Meanwhile, on the other hand, pesantren also inevitably have to participate in the "game" of global capitalism, with the awareness that outside information is followed and digested by pesantren if they do not want to be left behind in the massive acceleration of information today (Sahri, 2021).

In this context, the pesantren is actually at to borrow the expression of transition from a traditional society to an information consumer society (Wuryantai, 2004). The commodification of information by the forces of modern capitalism has shaped the logic of information consumerism. The epistemic logic of pesantren is reversed because it is formed into a structure for consumers, not producers, of information. Pesantren then tend to become passive "onlookers" who are always ready to accept the flow of information that hits like a flood (Solichah, 2023). Even in using the internet and absorbing information, Islamic boarding schools no longer absorb information in the form of use-value or utility, but are more related to social logic and a new lifestyle that is increasingly alienated from the real needs of human life (Jailani & Huda, 2023). The fact that the pesantren community is part of the fantastic number of internet users in Indonesia indicates this. Cases of deviant internet use in several Islamic boarding schools, including the various internal reactions of Islamic boarding schools to it, have also become a kind of "other side" of the reality of the internet in Islamic boarding schools (Aldeia dkk., 2023).

However, the world of Islamic boarding schools is not in a "silent" condition facing the above transitional situation. The variety of creative efforts carried out by some pesantren circles as described above is a clear picture that pesantren are carrying out what Ogburn calls the "adjustment" effort as mentioned above (Rani, 2023). The efforts made by the pesantren community were a good first step to narrow the gap between new material inventions and various aspects of non-material culture; in other words, to end the cultural lag. However, the adjustment process of course still requires a long time and hard work that will not be easy. Apart from the fact that they are still dealing with the complexity of the pesantren's response to the internet and resource issues, the adjustment process in the context of cultural disparities, as emphasized by Ogburn himself, usually takes a long time, even decades (Arfian dkk., 2023).

Nevertheless, this research has several limitations. The scope of the study is confined to certain pesantren communities and may not fully represent the diversity of responses across the broader pesantren landscape in Indonesia. Additionally, the dynamic and rapidly evolving nature of internet use in pesantren presents challenges in capturing a complete and up-to-date picture. Future studies are encouraged to employ longitudinal approaches and include wider geographic and institutional variations to obtain more comprehensive insights.

CONCLUSION

An overview of the digital divide among students in Salaf Islamic boarding schools reveals disparities across motivational, physical, and material access, as well as skills in accessing and utilising digital technologies. The findings indicate that a considerable number of students continue to experience challenges in engaging with technology. A total of 64% of students expressed dissatisfaction with their current gadgets, citing that 53% of them believe their devices lack the sophistication of more modern alternatives.

In terms of access, 67% of respondents reported unstable internet connectivity within the pesantren environment, highlighting infrastructural limitations. Regarding digital literacy, 53% of students are only at the introductory stage of understanding the information technologies available to them, while 5% admitted to not being able to use these technologies at all. Moreover, students demonstrated limited ability to evaluate digital information critically; 57% relied on online news sources, yet admitted they did not assess the credibility or origin of these sources.

The primary use of gadgets among students is to access social media platforms, with 81% stating that they engage with social media for between 0 and 7.5 hours per day. This trend suggests that digital technology is not yet being optimally harnessed to support educational development or self-improvement.

This research aimed to present an accurate picture of the digital divide experienced by santri in Salaf Islamic boarding schools and to raise awareness of the urgent need for enhanced digital literacy and equitable access to technology. Based on the findings, Islamic boarding schools must develop clear visions, missions, and strategies to manage digital access more effectively. With appropriate planning and commitment, pesantren have the potential to transform these digital challenges into opportunities for improving the quality of their human resources, all while preserving the core values and functions that define them.

While this study offers valuable insights into the digital divide within selected Salaf Islamic boarding schools, it is important to acknowledge its limitations. The scope of the research was restricted to specific pesantren communities, which may not adequately reflect the diversity of digital experiences across the broader Indonesian pesantren context. Furthermore, given the rapidly evolving nature of internet use and digital engagement within these institutions, capturing a complete and up-to-date representation posed certain challenges.

To address these limitations, future research is encouraged to adopt longitudinal methodologies that track changes and developments in digital literacy, access, and behaviour over time. Additionally, expanding the geographic coverage and including a wider variety of pesantren both in terms of institutional size, regional characteristics, and cultural practices would enhance the generalisability and depth of findings. Such comprehensive approaches are expected to provide more robust insights and inform more effective strategies for addressing the digital divide in Islamic boarding schools nationwide.

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