Jurnal Sosial, Politik dan Budaya (SOSPOLBUD)
Vol.2, No.1, 2023: 79-98

Capability Level New Media Literacy of Special Class I Checkpoint Immigration Office Batam

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A R T I C L E I N F O

Keywords : New Media Literacy, New Media, Digital Media, Government

Received : 08, November
Revised : 12, December
Accepted: 27, January

A B S T R A C T

The existence of new media has more or less changed people's behavior and lifestyle in communicating via digital. Seeing the pace and direction of these changes, the Government must immediately develop and implement a new communication strategy related to the implementation of e-government; that the current Government has implemented to provide good services to the community effectively and efficiently. Researchers want to know and measure New Media Literacy's twelve New Media Literacy Jenkins levels. The method used is a quantitative research method with a purposive sampling technique. The researcher recommends that government institutions as public servants can improve the New Media Literacy of each employee so that employees can communicate with the community effectively and efficiently.

DOI: https://10.55927/sospolbud.v2i1.2470
ISSN-E: 2962-2417
https://journal.formosapublisher.org/index.php/sospolbod

INTRODUCTION

Along with the development of information technology marked by the internet's presence, the media for getting information is also increasing. The new media era is starting to replace the traditional period, eroded by the rapid development of technology. The influence of New Media or New Media significantly impacts society, individually and in the broader social sphere. According to data from Hootsuite (we are social): Indonesia's digital report in 2022 shows a significant trend of increasing internet and social media users, amounting to 20 million users (18.7%) from 2020 to February 2022 (less than 2 years). As for the use of the internet and social media, Indonesian people have various reasons and purposes. So do not be surprised if the life of our society today cannot be separated by the presence of communication media technology (Abyan, 2020).

Several researchers have begun to conduct research on new media in recent years. The existence and massive use of this new media began to lead to and threaten the presence of an objective perspective and public space (Kurniawati & Baroroh, 2016).

The existence of new media has more or less changed people's behavior and lifestyle in communicating via digital. Changes in behavior due to the ease of obtaining this information have both a positive and negative impact. Based on these phenomena, knowledge about digital literacy in new media is needed as a basis for the community to have the ability to sort and evaluate media content so that they can utilize media content according to their needs. Therefore, everyone is responsible for using technology to interact or communicate in their daily lives (Restianty, 2018).

The Government's paradigm in implementing digital governance has shifted from anticipation (citizen-centric approach) to adaptive (citizen-driven system) to the needs of the community (Wantiknas, 2018). In other words, the Government needs digital technology to understand society better.

Social media is one of the platforms most often used by the public to voice their opinions on various issues, including Government policies. Therefore, media literacy is needed to balance the people who are starting to become media literate.

The strongest argument is one reason for choosing to prioritize the development of public services: a belief that conducive public services can lead and make the Indonesian nation realize good governance in the life of society, Government, and state.

Another reason is that public service reform has a reasonably broad impact on changes in the behavior of the bureaucracy and society. Therefore, the Government hopes that the reform of public services will create public services that can become the locomotive of development toward Good Governance.

Public services in Indonesia are still a crucial issue, and most people feel that the public services implemented so far are still far from accurate public services. Expensive public services, long time, convoluted processes, and lack

of accuracy almost happen in various kinds of public service activities in Indonesia. This weakness of public services has made people reluctant, lazy, and afraid to deal with the bureaucracy.

In this regard, there are several considerations why public services are the focus in starting the implementation of Good Governance, especially in Indonesia. First, improving the performance of public services is considered important as the main element of implementing Good Governance, which involves the Government, citizens, and the business sector. Second, public service is the domain of the three factors involved in implementing good governance by conducting very intensive interactions. Third, the values that have characterized the practice of Good Governance are translated more efficiently and significantly through public services (Maryam, 2016).

The Government must immediately follow up on current public unrest regarding public services. One of the supporters of Good Governance is the implementation of Electronic Government (E-gov), namely technology used by the Government to accelerate and facilitate services to the community (Dewi et al., 2022).

New Media Literacy in government circles is a relatively new research subject and is still rarely done in government circles. As a public servant, you need the ability to adapt to using new technology more quickly. That is a sign that government employees can use new media to provide the best service and increase public trust in the Government.

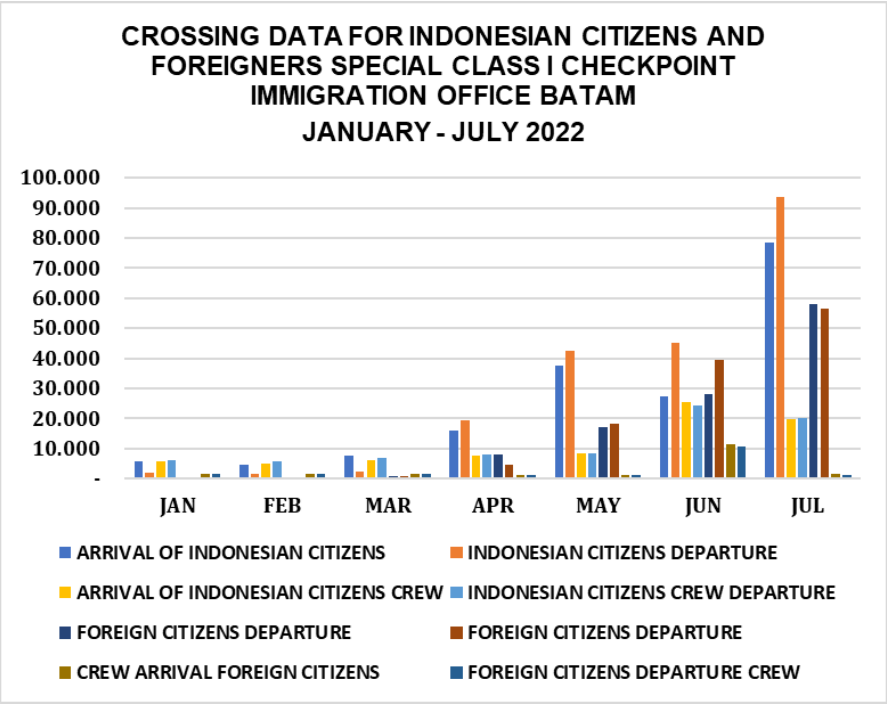
Special Class I Checkpoint Immigration Office Batam is one of the government agencies that have the duty and function as a public servant, which needs to develop and implement a new communication strategy to communicate with the community effectively and efficiently.

Special Class I Checkpoint Immigration Office Batam is the technical division of the Riau Islands Regional Office of the Ministry of Justice and Human Rights tasked with carrying out some of the primary duties and functions of the Indonesian Ministry of Justice, Law and Human Rights in the area of Immigration, particularly in the Area of the Riau Islands.

Immigration is the movement of people from one country to another where he is not a citizen. At the same time, Immigration is a matter of traffic of people entering or leaving the Indonesian Territory and its supervision to maintain the upholding of state sovereignty (Undang-Undang Republik Indonesia Nomor 6 Tahun 2011 Tentang Keimigrasian, 2011).

Batam City's strategic geographic location, which lies on the world's shipping lanes and directly borders Singapore, makes Batam a region well-respected in international trade.

The complexity of the various crossings makes Batam one of the busiest crossing routes in Indonesia. So it is not surprising that the Batam area has many ports that serve shipping lanes for goods and tourists.



Graph 1. Crossing Data for Indonesian Citizens and Foreigners Special Class I Checkpoint Immigration Office Batam from January to July 2022. (*Source: Document*)

Therefore, it takes the ability of New Media Literacy from government employees, especially employees of the Special Class I Checkpoint Immigration Office Batam, to improve services to the community.

Based on the above background, researchers are interested in measuring the New Media Literacy (NML) ability of the Special Class I Checkpoint Immigration Office Batam employees based on the twelve skills (NML) of Jenkins and his colleagues. Researchers want to research: (a) What is the NML level of the Special Class I Checkpoint Immigration Office Batam employees?; (b) Is there a significant difference in the NML scores concerning the age and sex of the respondents?; (c) Is there a significant difference in the NML score on the duration of using digital media and the average period of using digital media of respondents?

This study is an update of previous research that focuses more on the new media literacy skills of officers, specifically the Special Class I Checkpoint Immigration Office Batam officers, based on the 12 New Media Literacy Skills by Jenkins (2006) and is intended to serve as a benchmark for further research.

Framework New Media Literacy

Jenkins et al. (2006) said that almost all new media literacy involves social skills developed through collaboration and networking(Jenkins et al., 2006). These skills build on traditional literacy, research, technical, and critical analytical skills taught in the classroom. They assert that these skills are necessary for full and meaningful participation in the information society.

These new skills include Play, Performance, Simulation, Appropriation, Multitasking, Distributed Cognition, Collective Intelligence, Judgment, Transmedia Navigation, Networking, and Negotiation, added to Visualization (Jenkins et al., 2006).

Jenkins and his colleagues also emphasized the shift in literacy focus from individual expression to community participation. Therefore, cooperating with others becomes much more critical. Here are Jenkins' 12 new media literacy skills:

a. *Play*: The ability to experiment with the environment to solve problems.
b. *Performance*: Ability to adopt alternative identities for improvisation and discovery.
c. *Simulation*: Ability to interpret and build dynamic models of real-world processes.
d. *Appropriation*: Ability to significantly sample and mix media content.
e. *Multitasking*: Ability to scan surroundings and shift focus to prominent details.
f. *Distributed Cognition*: The ability to interact meaningfully with tools that expand mental skills.
g. *Collective Intelligence*: Ability to share knowledge and compare notes with others to achieve common goals.
h. *Judgment*: Ability to assess the reliability and credibility of various sources of information.
i. *Transmedia Navigation*: Ability to follow storylines and lead through multiple modalities.
j. *Networking*: Ability to search, synthesize and disseminate information.
k. *Negotiation*: The ability to travel across diverse communities, understand and respect multiple perspectives, and understand and follow alternative norms.
l. *Visualization*: The ability to interpret and create data representations to express ideas, find patterns, and identify trends.

(Jenkins, Purushotma, Clinton, Weigel, & Robison, 2006).

Potter (2014) developed his idea that media literacy is not a different but a multidimensional and continuum ability. This concept aligns with various digital literacy concepts as media literacy focuses on digital media, which is sometimes also associated with the internet and new media (Kurnia & Wijayanto, 2020). As has been defined by Livingstone (2004) in Fitryarini (2016), that media literacy is the ability to access, analyze, evaluate, and create messages in various contexts (Fitryarini, 2016). Media literacy is an important skill to assess the credibility of information on social networks discussed in different contexts.

Digital literacy is a concept and practice that not only focuses on the ability to master technology and operate tools but also emphasizes the ability to use digital media productively and responsibly (Kusumastuti et al., 2021). Davie, Fidler, & Gorbis (2011) in Balaban-Sali (2020) defines new media literacy as "the ability to assess and develop content using new media forms

critically and to utilize new media for persuasive communication" (Balaban-Sali, 2012).

New Media, Media Literacy, Literacy Digital

McQuail (2010:153) has an opinion on new media, a place where all communication messages are decentralized and disseminated via satellite, which helps expand the use of cable and computer networks and increases audience participation in the communication process (Claudia & Rahmanto, 2019). Sujatmiko (2017) argues that new media is a process of digitizing and understanding concepts of the times regarding technology and science, from everything manual to automatic and everything complex to concise (Sujatmiko, 2017).

In conclusion, new media acts as a forum for channeling information from whistleblowers or sources of information to audiences or recipients, making it easier for someone to obtain digital information.

Along with the development of technology, media literacy is increasingly needed, especially at the level of government employees in serving the community. That is because it is easier for the public to access digital media, so employees must be able to master new media literacy to balance the community's new media literacy level.

McLean, Paxton, & Wertheim (2016); Polizzi (2020) in Luo, Yang, & Kang (2022) have the opinion that media literacy is the ability to access, analyze, evaluate, create and share media critically to help reduce the negative impact of media communication on users (Luo et al., 2022).

Previous research conveyed the opinion of a Professor in journalism from the University of the Philippines that the emphasis on public empowerment is essential in responding to the media. Characterized by the development of information technology, along with the development of the media from time to time, it is increasingly dynamic with variations and very diverse content designs (programs) (Rahayu, 2013).

Rahayu (2013) adds that media literacy is an activity that emphasizes the educational aspect of the community so that they know how to access, select and absorb media messages so that media literacy becomes an alternative solution in media (Rahayu, 2013).

Silawati (2019) conveyed the same: one of the future skills is new media literacy, a combination of media literacy skills, cultural literacy, and information or technology literacy. Schools can also use New Media Literacy as a learning medium. However, there is still uncertainty among researchers, parents, and PAUD teachers about how digital tools can collaborate effectively with non-digital traditional agencies in children's daily lives. Therefore, prospective kindergarten teachers need understanding and perspective in teaching new media literacy to children (Silawati, 2019).

Previous research conducted by Soleh, Oka, & Kristiawan (2020) also mentioned making digital literacy a means to help work in the office. In addition, using media literacy helps to communicate between employees,

making it easier to coordinate both superior subordinates and subordinates (Soleh et al., 2020).

Media literacy is a simple development of interpretive skills. Besides that, media literacy also involves a series of digital production skills, including creating digital content, being critical of existing digital content, and contributing to and consuming digital content (Suwana & Lily, 2017).

Digital literacy requires the ability to use the internet. The study of digital literacy has developed, giving rise to various definitions with a limited scope of communication and information. New media, as well as a systematic understanding of the fulfillment of data, need to an evaluation material for various types of new media critically so that they can take part in community activities in making information safely and appropriately through digital technology (Sharma et al., 2016) (Law et al., 2018).

Digital literacy includes two main aspects, technical and non-technical aspects; of course, each has a specific purpose for the interests of individuals and society (Rumata & Nugraha, 2020).

See these conditions, and it is necessary to have new media literacy skills for each employee so that they can quickly master and operate the internet and new media technologies associated with the implementation of e-government launched by the current Government.

H1: The longer the employee uses digital media, the higher the employee's NML level.

H2: The more often employees use or operate digital media, the higher the employee's NML level.

METHODOLOGY

The method used is a quantitative research method. Quantitative research methods measure (measurable elements) each variable studied; therefore, researchers use instruments (measuring instruments). Using a tool tested for validity and reliability means there is no need to doubt the validity of the research data—using the survey method because all sample members or respondents in the survey research answer the same questions (Sugiyono & Lestari, 2021).

The population and sample are 115 employees of the Special Class I Checkpoint Immigration Office Batam, with data collection techniques using a questionnaire with a closed answer system. A total of 58 questions with a Likert scale model representing 12 (twelve) New Media Literacy skills: Play, Performance, Simulation, Appropriation, Multitasking, Distributed Cognition, Collective Intelligence, Judgment, Transmedia Navigation, Networking, Negotiation, and Visualization.

Validity Test

The validity test is declared valid if the data collected is the same as the data in the field so that it can use the instrument to measure the extent to which the measurements can be measured following what the researcher wants (Usman & Gustalika, 2022). The results of the validity test of 58 question items using the SPSS version 26 application showed significant results (Sig. (2-tailed)) < 0.05 and r count > r table, and the Pearson Correlation was positive, so the 58 question items were declared valid.

Reliability Test

The reliability test measures the extent to which the level of consistency of a measurement or the period to which one can understand the question so that similar interpretations arise in understanding the question (Dhamayanti et al., 2018).

We are testing the data's reliability by looking for Cronbach's Alpha values from all questions. The question group can be declared reliable if the reliability coefficient is ≥0.7.

Using the SPSS version 26 application, the reliability test steps are as follows: Analyze - Scale - Reliability Analysis. From the reliability test results, the value of Cronbach's Alpha is 0.979 > 0.70. Overall, the question tool proves robust and can be used for further research.

Normality Test

The next stage of data processing is the normality test of the data. This stage pushes the value distribution data using Kolmogorov-Smirnov One-Sample Test. The information is categorized as generally distributed if the significance value exceeds 0.005 (del Barrio et al., 2020).

Kruskal-Wallis Test

In the development of non-parametric methods used to analyze the equivalence of the parametric approach, W. H. Kruskal and W. A. Wallis introduced a non-parametric test comparable to the mean equality test in the analysis of variance known as the Kruskal-Wallis test in 1952. Syofian (2015) in Quraisy, A., Wahyuddin, & Hasni, N. (2021) said that W.H. Kruskal and Wallis in 1952 introduced the Kruskal-Wallis test, which is a development of the Wilcoxon test with categories of more than two independent sample groups (Quraisy et al., 2021). The Kruskal-Wallis test is also one of the non-parametric statistical tests to test the difference in significance between groups of independent variables and the dependent variable (Jamco & Balami, 2020).

The Kruskal-Wallis test is a non-parametric one-way ANOVA test used to test the hypothesis of this study (Johnson, 2022). The function of the Kruskal-Wallis test is to determine the ranking of data with continuous or ordinal types and analyze data. This ranking-based test functions specifically to see the difference between independent variables (2 or more) in a dependent variable.

Post Hoc Test

The last is to do the Post Hoc Test, in which the results of the Kruskal-Wallis test state that there are differences in the variables. This follow-up test uses the Dunnet-C test because the number of research samples is quite large. The post hoc test is performed only for variables with more than 3 (three) codes (content type variables).

FINDINGS

Researchers surveyed 115 respondents from 370 Special Class I Checkpoint Immigration Office Batam employees. With this data, the researchers analyzed the data based on gender, age, duration of using digital media, and the average length of time using digital media.

Based on the results of statistical tests, all data entered from the survey results are declared valid because all respondents answered all survey questions without being missed or blank. With 115 respondents at the Special Class I Checkpoint Immigration Office Batam, the results of the New Media Literacy (NML) measurement are as follows:

Table 1. The results of the New Media Literacy (NML) level data analysis test

NML Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	14	12,2	12,2	12,2
	High	101	87,8	87,8	100,2
	Total	115	100,0	100,0	

Based on table 1. The results above show that the NML level of Special Class I Checkpoint Immigration Office Batam mostly has a high NML level of 87.8% and a medium NML level of 12.2%.

Table 2**.** Test results of gender frequency data analysis

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	84	73,0	73,0	73,0
	Female	31	27,0	27,0	100,2
	Total	115	100,0	100,0	

Based on Table 2. Based on Table 2. Analysis of research data with gender variable with detailed analysis results, namely the number of male respondents, as many as 84 people (73%), and 31 people (27%) for the number of female respondents.

Table 3. The results of the data analysis of the age frequency level

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21 – 30 years	55	47,8	47,8	47,8
	31 – 40 years	60	52,2	52,2	100,2
	Total	115	100,0	100,0	

Based on Table 3. The results of data analysis with age variable obtained the following results: The group of respondents with an age range of 31-40 years amounted to 60 people (52.2%) being the majority age group, followed by the age group 21-30 years totaling 55 people (47.8%).

Table 4. Old Frequency Level Using Digital Media.

Long Time Using Digital Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 year	9	7,8	7,8	7,8
	1 – 3 years	28	24,3	24,3	32,2
	> 3 years	78	67,8	67,8	100,0
	Total	115	100,0	100,0	

In Table 4. The survey results said that the length of time respondents used digital media > 3 years became the majority of respondents, as many as 78 people (67.8%), followed by respondents with a period of 1-3 years as many as 28 people (24.3%), and the remaining 9 people (7,8%) with a period of < 1 year.

Table 5. Level of Frequency Duration of Accessing Digital Media

Average Digital Media Usage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 hour	23	20,0	20,0	20,0
	1 – 3 hours	34	29,6	29,6	49,6
	> 3 hours	58	50,4	50,4	100,0
	Total	115	100,0	100,0	

They viewed from Table 5. From the analysis results, each respondent has a different duration of accessing digital media; the majority of respondents accessed more than 3 hours as many as 58 people (50.4%), followed by a period of 1-3 hours for as many as 34 people (29,6%), the remaining 23 people (20%) with an access time of less than 1 hour.

Normality Test

The normality test of the data in this study used the Kolmogorov Smirnov One Sample Test because the number of samples was more than 100

Table 6. The results of the normality test using the one-sample Kolmogorov-Smirnov method

One-Sample Kolmogorov-Smirnov Test

		New Media Literacy Level
N		115
Normal Parameters[a,b]	Mean	246,87
	Std. Deviation	29,367
Most Extreme Differences	Absolute	,102
	Positive	,071
	Negative	-,102
Test Statistic		,102
Asymp. Sig. (2-tailed)		,005[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

From the table above, we can see that the significance value (2-tailed) is 0.005, which is smaller than 0.05 (0.005 < 0.05). The results stated that the data in this study were not normally distributed, so for further statistical tests using non-parametric statistical tests, the Kruskal-Wallis Test test.

Kruskal-Wallis Test

Perform the Kruskal-Wallis test to test each independent variable with the dependent variable.

Table 7. Results of the Kruskal-Wallis test for gender variables on NML

Kruskal-Wallis Test

Ranks

	Gender	N	Mean Rank
New Media Literacy Level	Male	84	60,21
	Female	31	52,02
	Total	115	

Test Statistics[a,b]

	New Media Literacy Level
Kruskal-Wallis H	1,368
Df	1
Asymp. Sig.	,242

a. Kruskal Wallis Test
b. Grouping Variable: Gender

The significance value is .242, which is greater than 0.05. This test shows no significant difference between the sexes and the NML level of the Special Class I Checkpoint Immigration Office Batam employees. In other words, the New Media Literacy level of all employees is the same.

Table 8. Kruskal-Wallis test results for age variables on NML

Kruskal-Wallis Test

Ranks

	Usia	N	Mean Rank
New Media Literacy Level	21 – 30 years	55	58,60
	31 – 40 years	60	57,45
	Total	115	

Test Statistics[a,b]

	New Media Literacy Level
Kruskal-Wallis H	,034
Df	1
Asymp. Sig.	,853

a. Kruskal Wallis Test
b. Grouping Variable: Age

The significance value is .853, which is greater than 0.05. This test shows no significant difference between the age and the NML level of the Special Class I Checkpoint Immigration Office Batam employees. In other words, the New Media Literacy level of all employees is the same.

Table 9. Kruskal-Wallis test results for old variables using digital media on NML

Kruskal-Wallis Test

Ranks

	Long Time Using Digital Media	N	Mean Rank
New Media Literacy Level	< 1 year	9	16,83
	1 – 3 years	28	21,61
	> 3 years	78	75,81
	Total	115	

Test Statistics[a,b]

	New Media Literacy Level
Kruskal-Wallis H	69,372
Df	2
Asymp. Sig.	,000

a. Kruskal Wallis Test
b. Grouping Variable: Long Time Using Digital Media

Based on the probability from the output table above, it shows the Asymp value. The sig/asymptotic significance is 0.000, or the probability is below 0.05 (0.000 < 0.05). This test shows a significant difference between the length of time using digital media and NML, so further tests are needed to prove H1.

Table 10. The results of the Kruskal-Wallis test for the variable duration of using digital media on the NML

Kruskal-Wallis Test

Ranks

	Average Usage of Digital Media	N	Mean Rank
New Media Literacy Level	< 1 hour	23	25,41
	1 – 3 hours	34	64,37
	> 3 hours	58	67,19
	Total	115	

Test Statistics[a,b]

	New Media Literacy Level
Kruskal-Wallis H	27,627
Df	2
Asymp. Sig.	,000

a. Kruskal Wallis Test
b. Grouping Variable: Average Usage of Digital Media

Based on the probability from the output table above, it shows the Asymp value. The sig/asymptotic significance is 0.000, or the probability is below 0.05 (0.000 < 0.05). This test shows a significant difference between the average use of digital media and NML, thus requiring further tests to prove H2.

Post Hoc Test

Due to the old variable using digital media with the average variable duration of digital media use consisting of more than two codes and differences in New Media Literacy, it is necessary to carry out further tests. Post Hoc follow-up test using Dunnet C test with the results shown in the table.

Table 11. Advanced test results with Dunnet-c. test

Post Hoc Test

Multiple Comparisons

Dependent Variable: Tingkat New Media Literacy

Dunnett C

(I) Long Time Using Digital Media	(J) Long Time Using Digital Media	Mean Difference (I-J)	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
<1 year	1-3 years	-18,813	11,086	-50,41	12,78
	>3 years	-62,021*	11,190	-93,80	-30,24
1–3 years	<1 tahun	18,813	11,086	-12,78	50,41
	>3 tahun	-43,208*	2,657	-49,64	-36,78
>3 years	<1 tahun	62,021*	11,190	30,24	93,80
	1–3 tahun	43,208*	2,657	36,78	49,64

*. The mean difference is significant at the 0.005 level.

Based on the table above, using digital media for more than 3 years has the highest difference in the level of New Media Literacy with a difference in the value of 43.208 for 1-3 years and less than 1 year having a difference in the value of 62,021. The table above concludes that the longer the employee uses digital media, the higher the employee's NML level, so H1 is accepted.

Table 12. Further test results with Dunnet-c. test
Post Hoc Test

Multiple Comparisons					
Dependent Variable: Tingkat New Media Literacy					
Dunnett C					
(I) Average Usage of Digital Media	(J) Average Usage of Digital Media	Mean Difference (I-J)	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
< 1 Hour	1-3 hours	-37,582*	8,003	-57,55	-17,61
	>3 hours	-40,038*	7,332	-58,34	-21,74
1 – 3 Hours	<1 hour	37,582*	8,003	17,61	57,55
	>3 hours	-2,456	5,122	-14,95	10,04
> 3 Hours	<1 hour	40,038*	7,332	21,74	58,34
	1–3 Hours	2,456	5,122	-10,04	14,95

*. The mean difference is significant at the 0.005 level.

The table above shows that the media usage time of more than 3 hours has the most significant difference, with a difference of 2.456 compared to the time length of 1-3 hours and the time of less than 1 hour has a difference of 40.038. In conclusion, the more often employees use or operate digital media, the higher the employee's NML level so that H2 is accepted.

DISCUSSION

The statistical test results above found that the new Media Literacy level of the Special Class I Checkpoint Immigration Office Batam employees was relatively high at 87.8%. The normality test shows that the data distribution in this study is not normal, so it is necessary to carry out further tests with the Kruskal-Wallis test.

The results of the Kruskal-Wallis test show a significant difference between the length of time using digital media and the level of New Media Literacy. Likewise, the significance value of digital media use's average duration with the New Media Literacy level. From these two results, the researcher analyzed further by using the Dunnet C post hoc test to get the ranking order.

The follow-up test for the length of time using digital media with the New Media Literacy level showed that using digital media for more than 3 years had the highest New Media Literacy level difference, followed by 1-3 years and the last less than 1 year. It can mean that the longer employees use digital media, the higher their NML level.

The next follow-up test is to test average digital media use duration against the New Media Literacy level. The result is that the period of more than

3 hours has the highest difference in the New Media Literacy level. Then followed by time duration of 1-3 hours, and the last time duration was less than 1 hour. So that the more often employees use or operate digital media, the higher the level of New Media Literacy, the employee.

Government employees use New Media Literacy to realize effective and efficient public services. However, New Media Literacy is also needed to provide more facilities to the community, who are expected to be involved and take an active role in the policy-making process. Porter assesses the higher the level of media literacy that a person has, the more meanings can be extracted even if that person criticizes every meaning conveyed by the media (Rahayu, 2013).

According to Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems, New Media Literacy is a part of Government administration that utilizes information and communication technology, which comprehensively provides space for each agency to map out the duties and functions of each employee in the work unit, to be able to support performance targets fully and improve the quality of public services (Peraturan Presiden Republik Indonesia Nomor 95 Tahun 2018 Tentang Sistem Pemerintahan Berbasis Elektronik, 2018).

CONCLUSION

The research data above concludes that the average Special Class I Checkpoint Immigration Office Batam has a high New Media Literacy (NML) level. This study also finds that there is no difference between employees' gender and age in terms of NML level, which means that the NML level of all employees is the same in terms of gender and age. Another result showed that after further testing with the Kruskal-Wallis test and a post hoc test with Dunnet-C, NML scores looked different depending on the duration of digital media use and average social media use per day, the longer the usage of digital media; the higher the literacy rate for new media, so H1 and H2 are accepted.

This study provides the novelty of the NML level to government employees. It also supports electronic-based public services, fully supporting performance targets and improving the quality of public services. Reflecting on the results of this study, the researcher recommends that government institutions as public servants can improve the NML of their employees, considering that the longer they use media, the higher the level of New Media Literacy so that employees can communicate with the community effectively and efficiently.

LIMITATIONS AND FUTURE RESEARCH

This research has limitations that provide useful opportunities for future research. This research was carried out in one government agency only so the results may not be generalized to other government agencies. Future research can expand this research to be applied to all government agencies in the field of public services

ACKNOWLEDGMENT

This research is fully supported by the Ministry of Communication and Information Technology of the Republic of Indonesia as the scholarship provider and funding this research.

REFERENCES

Abyan, G. S. (2020). Media Literacy Strategies of Mahasantri Gontor 2 in Preventing the Issue of Hoax. *Journal of Islamic Communication*, *2*(2), 155–166.

Balaban-Sali, J. (2012). New Media Literacies of Communication Students. *Contemporary Educational Technology*, *3*(4), 265–277. https://doi.org/10.30935/cedtech/6083

Claudia, N. A. M., & Rahmanto, A. N. (2019). Media Baru dan Selebgram. *Jurnal Komunikasi Massa*, *1*.

del Barrio, E., Inouzhe, H., & Matrán, C. (2020). On approximate validation of models: a Kolmogorov–Smirnov-based approach. *TEST*, *29*(4), 938–965. https://doi.org/10.1007/s11749-019-00691-1

Dewi, D. S. K., Harsono, J., Desriyanti, D., Yulianti, D. B., & Azhar, I. Y. (2022). The Development of Website-based Ngebel Tourism from an E-Government Perspective. *Otoritas : Jurnal Ilmu Pemerintahan*, *12*(1), 30–40. https://doi.org/10.26618/ojip.v12i1.6127

Dhamayanti, M., Rachmawati, A. D., Arisanti, N., Setiawati, E. P., Rusmi, V. K., & Sekarwana, N. (2018). Validitas dan Reliabilitas Kuesioner Skrining Kekerasan terhadap Anak "ICAST-C" versi Bahasa Indonesia. *Jurnal Keperawatan Padjadjaran*, *5*(3), 281–289. https://doi.org/10.24198/jkp.v5i3.650

Fitryarini, I. (2016). Literasi Media Pada Mahasiswa Prodi Ilmu Komunikasi Universitas Mulawarman. *Jurnal Komunikasi*, *8*(1), 51–67.

Undang-Undang Republik indonesia Nomor 6 Tahun 2011 Tentang Keimigrasian, Pub. L. No. 6, Kementerian Sekretariat Negara RI (2011).

Peraturan Presiden Republik Indonesia Nomor 95 Tahun 2018 Tentang Sistem Pemerintahan Berbasis Elektronik, Pub. L. No. 95, Kementerian Sekretariat Negara Republik Indonesia (2018).

Jamco, J. C. S., & Balami, A. M. (2020). Kruskal-Wallis Analysis to Determine Student Learning Concentration Based on the Field of Interest of the Statistics Study Program, Faculty of Mathematics and Natural Sciences Pattimura University. *PARAMETER : Jurnal Riset Matematika, Statistika Dan Terapanya*, *1*(1), 39–44.

Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & Robison, A. J. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st* (H. Jenkins, Ed.). The MacArthur Foundation.

Johnson, R. W. (2022). Alternate Forms of the One-Way ANOVA F and Kruskal–Wallis Test Statistics. *JSDS: Journal of Statistics and Data Science Education*, *30*(1), 82–85. https://doi.org/10.1080/26939169.2021.2025177

Kurnia, N., & Wijayanto, X. A. (2020). Kolaborasi Sebagai Kunci: Membumikan Kompetensi Literasi Digital Japelidi. In N. Kurnia, L. Nurhajati, & S. I. Astuti (Eds.), *Kolaborasi Lawan (Hoax) Covid-19: Kampanye, Riset dan Pengalama Japelidi di Tengah Pandemi* (pp. 1–34). Program Studi Magister Ilmu Komunikasi UGM.

Kurniawati, J., & Baroroh, S. (2016). Literasi Media Digital Mahasiswa Universitas Muhammadiyah Bengkulu. *Jurnal Komunikator*, *8*(2), 51–66.

Kusumastuti, F., Astuti, S. I., & Kurnia, N. (2021). Pengantar Modul Etis Bermedia Digital. In F. Kusumastuti & S. I. Astuti (Eds.), *Modul Etis Bermedia Digital* (1st ed., pp. 1–17). Kementerian Komunikasi dan Informatika.

Law, N., Woo, D., de la Torre, J., & Wong, G. (2018). *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2.* UNESCO Institute for Statistics.

Luo, Y. F., Yang, S. C., & Kang, S. (2022). New media literacy and news trustworthiness: An application of importance-performance analysis. *Computers & Education*, *185*, 104529. https://doi.org/10.1016/j.compedu.2022.104529

Maryam, N. S. (2016). Mewujudkan Good Governance Melalui Pelayanan Publik. *JIPSi: Jurnal Ilmu Politik Dan Komunikasi*, *6*(1).

Quraisy, A., Wahyuddin, & Hasni, N. (2021). Analisis Kruskal-Wallis Terhadap Kemampuan Numerik Siswa. *VARIANSI: Journal of Statistics and Its Application on Teaching and Research* , *3*(3), 156–161.

Rahayu. (2013). Media Literacy: Agenda "Pendidikan" Nasional yang Terabaikan. *Jurnal ILMU KOMUNIKASI*, *1*(2). https://doi.org/10.24002/jik.v1i2.166

Restianty, A. (2018). Literasi Digital, Sebuah Tantangan Baru Dalam Literasi Media. *Jurnal Gunahumas*, *1*(1), 72–87.

Rumata, V. M., & Nugraha, D. A. (2020). Rendahnya tingkat perilaku digital ASN kementerian kominfo: Survei literasi digital pada instansi pemerintah. *Jurnal Studi Komunikasi (Indonesian Journal of Communications Studies)*, *4*(2), 467. https://doi.org/10.25139/jsk.v4i2.2230

Sharma, R., Fantin, A.-R., Prabhu, N., Guan, C., & Dattakumar, A. (2016). Digital literacy and knowledge societies: A grounded theory investigation of sustainable development. *Telecommunications Policy*, *40*(7), 628–643. https://doi.org/10.1016/j.telpol.2016.05.003

Silawati, E. (2019). New Media Literacy in the Context of Early Childhood Education (An Overview from Indonesian Kindergarten Future Teachers). *Proceedings of the International Conference on Education, Social Sciences and Humanities - ICESSHum 2019*, 12–16. https://doi.org/10.32698/hum0190

Soleh, A. M., Oka, I. G. A. M., & Kristiawan, M. (2020). Kondisi Literasi Media Digital dalam Aktifitas Kerja Pegawai Politeknik Penerbangan Palembang. *Ilmu Pendidikan: Jurnal Kajian Teori Dan Praktik Kependidikan*, *5*(2), 51–62.

Sugiyono, & Lestari, P. (2021). *Metode Penelitian Komunikasi* (Sunarto, Ed.; 1st ed.). Alfabeta.

Sujatmiko, H. (2017). Motif Penggunaan "Meme" Dalam Aplikasi Blackberry Messenger (BBM) Pada Mahasiswa Ilmu Komunikasi Universitas Mulawarman. *EJournal Ilmu Komunikasi*, *5*(3), 630–642.

Suwana, F., & Lily. (2017). Empowering Indonesian women through building digital media literacy. *Kasetsart Journal of Social Sciences*, *38*(3), 212–217. https://doi.org/10.1016/j.kjss.2016.10.004

Usman, M. L. L., & Gustalika, M. A. (2022). Pengujian Validitas dan Reliabilitas System Usability Scale (SUS) Untuk Perangkat Smartphone. *Jurnal Ecotipe (Electronic, Control, Telecommunication, Information, and Power Engineering)*, *9*(1), 19–24. https://doi.org/10.33019/jurnalecotipe.v9i1.2805

Wantiknas. (2018). *Pengembangan Digital Government Tahun Anggaran 2018*.