

# Need Analysis and Development of Webtoon-based Online Comics for Public Middle Schools: A Preliminary Study

Received: 21-06-2022

Revised: 06-11-2022

Accepted: 12-12-2022

Zaitun<sup>1\*</sup>, Kasmianti<sup>2</sup>, Nurhayati Zein<sup>3</sup>, Raja Rahima M. R.A<sup>4</sup>, Musa Thahir<sup>5</sup>

<sup>1,2,3,4,5</sup> Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia; [zaitun@uin-suska.ac.id](mailto:zaitun@uin-suska.ac.id)

## Abstract

### Keywords:

Need Analysis,  
Webtoon-based  
Online Comics,  
Development  
Studies.

This research aims to investigate the understanding of religious moderation among teachers and students in the context of Islamic Religious Education. Data for this research was collected through a survey conducted in junior high schools. The results of the data analysis show that the majority of teachers and students show a positive attitude toward religious moderation. They widely accept state ideology as the basis for social harmony, respect ideological diversity, and reject violence on religious grounds. Apart from that, this research reveals that teachers and students also have a tolerant attitude towards diverse local cultures. They see local culture as part of their cultural heritage that should be respected, even if it sometimes conflicts with their religious beliefs. These findings have important implications in the educational context, underscoring the importance of understanding religious moderation among the younger generation to create a more inclusive and inclusive society. diverse. This research provides valuable insight into teachers' and students' views on religious moderation, which can serve as a basis for the development of more effective educational strategies in promoting attitudes of moderation and tolerance among the younger generation.

## Abstrak

### Kata kunci:

Need Analysis,  
Komik Online  
berbasis Webtoon,  
Studi  
Pengembangan.

Penelitian ini bertujuan untuk menginvestigasi pemahaman tentang moderasi beragama di kalangan guru dan siswa dalam konteks Pendidikan Agama Islam. Data untuk penelitian ini dikumpulkan melalui survei yang dilakukan di sekolah menengah pertama. Hasil analisis data menunjukkan bahwa mayoritas guru dan siswa menunjukkan sikap positif terhadap moderasi beragama. Mereka secara luas menerima ideologi negara sebagai dasar bagi kerukunan sosial, menghargai keragaman ideologi, dan menolak kekerasan atas dasar agama. Selain itu, penelitian ini mengungkapkan bahwa guru dan siswa juga memiliki sikap toleransi terhadap budaya lokal yang beragam. Mereka melihat budaya lokal sebagai bagian dari warisan agama mereka. Temuan ini memiliki dampak yang penting dalam konteks pendidikan, menggarisbawahi pentingnya pemahaman moderasi beragama di kalangan generasi muda untuk menciptakan masyarakat yang lebih inklusif dan beragam. Penelitian ini memberikan wawasan yang berharga tentang pandangan guru dan siswa terhadap moderasi beragama, yang dapat menjadi dasar untuk pengembangan strategi pendidikan yang lebih efektif dalam mempromosikan sikap moderasi dan toleransi di antara generasi muda.

Corresponding Author:

Zaitun

Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia; [zaitun@uin-suska.ac.id](mailto:zaitun@uin-suska.ac.id)

## INTRODUCTION

Indonesia is one of the countries with the largest Muslim population in the world, so it is an important focus in terms of Islamic moderation. Moderation is a basic teaching in Islam. Moderate Islam is a religious understanding that is very appropriate to the context of diversity in various fields, such as religion, customs, ethnicity, and nation.<sup>1</sup> Thus, understanding related to religious moderation must be understood contextually, not only textually, but the way of understanding religion must be moderate because Indonesia has many cultures and customs.

The fact that Indonesia is a pluralistic country cannot be denied. Diversity is part of Indonesia's unique characteristics which must be addressed by every citizen in the right way so that it can become a color capable of enriching the treasures of the nation's civilization.<sup>2</sup> Even though diversity has become a reality that is recognized by all citizens of the nation, attitudes to the exact question is still a problem, especially when diversity and differences are related to religious beliefs. Belief in a person's religion often closes down the opportunity for truth in other beliefs.<sup>3</sup> At this stage, claims to the truth of one's religion will become a means of judgment against "heroism" in other beliefs. A theological awareness base like this only needs a small trigger to spread and develop into social aspects that give rise to intolerance and radical movements.

Recently, the understanding of radical Islam has become stronger, as indicated by the many cases of intolerance both in society and in schools. This is of course a problem that must be addressed immediately because it can damage the social construction of Indonesian society, which is very multicultural. The problem will become more complicated and worrying when radicalism and religious intolerance also occur infecting students at school because they are the ones who will determine the future of the nation and state. Research conducted by the Center for Islamic and Community Studies (PPIM) UIN Syarif Hidayatullah Jakarta on pupils, students, teachers and lecturers in 34 provinces in Indonesia stated that students and students have a tendency towards intolerant religious views with a percentage of radical opinions of 58.5%, internal intolerance opinion 51.1%, and external intolerance opinion 34.3%.<sup>4</sup>

Furthermore, the results of survey research conducted by LaKIP Jakarta showed that 48.9% of students in Jabodetabek expressed their approval for radical actions.<sup>5</sup> Apart from that, Fadjar said that students have a high tendency to support radicalism. This was obtained from several student responses including: 65% (1594 respondents) supported the implementation of immorality sweeping, 18% (446 respondents)

---

<sup>1</sup> Darlis, "Mengusung Moderasi Islam Di Tengah Masyarakat Multikultur," *Rausyan Fikr* 13, no. 2 (2013): 225-53.

<sup>2</sup> Gina Lestari, "Bhinneka Tunggal Ika : Khasanah Multikultural," *Jurnal Pendidikan Pancasila Dan Kewarganegaraan* 1, no. 1 (2015): 31-37.

<sup>3</sup> Hermawan, "Nilai Moderasi Islam Dan Internalisasinya," *Insania* 25, no. 1 (2020): 31-43.

<sup>4</sup> PPIM, *Api Dalam Sekam: Keberagaman Gen Z (Survei Nasional Tentang Sikap Keberagamaan Di Sekolah Dan Universitas Di Indonesia)* (Jakarta: UIN Syarif Hidayatullah Jakarta, 2017).

<sup>5</sup> Halimur Rosyid, Ahmad Sholikin, and Moh Sa'diyin, "Intoleransi, Radikalisme Dan Terorise Di Lamongan," *Jurnal Polinter: Kajian Politik Dan Hubungan Internasional* 4, no. 1 (2018): 1-20.

supported and participated active in sweeping activities.<sup>6</sup> This data gives us an understanding that the seeds of radicalism and intolerance have really emerged and are infecting students in schools and universities.

The conditions above raise big questions about how the values of Islamic moderation which have become the mainstream understanding of the Islamic religion in Indonesia can begin to face major challenges from radical Islamic understanding. Therefore, in fighting various kinds of conflicts, it is necessary to create a media in which there are values that illustrate the beauty of the value of religious moderation. The media must be in accordance with the development of the millennial generation who always use the internet. One way to provide students with an understanding of the values of religious moderation is through mass media such as newspapers, television, or by publishing books.<sup>7</sup> This data gives us an understanding that the seeds of radicalism and intolerance have really emerged and are infecting students in schools and universities.

The conditions above raise big questions about how the values of Islamic moderation which have become the mainstream understanding of the Islamic religion in Indonesia can begin to face major challenges from radical Islamic understanding. Therefore, in fighting various kinds of conflicts, it is necessary to create a media in which there are values that illustrate the beauty of the value of religious moderation. The media must be in accordance with the development of the millennial generation who always use the internet. One way to provide students with an understanding of the values of religious moderation is through mass media such as newspapers, television, or by publishing books.<sup>8</sup> Webtoon is one of the platforms providing Line Webtoon services which can be read for free by everyone.<sup>9</sup> Webtoon is the most popular Line Webtoon provider application in Indonesia.<sup>10</sup> Webtoon is the most popular Line Webtoon

---

<sup>6</sup> Ahmad Sholikin, "Kabupaten Lamongan," *Journal of Governance* 3, no. 3 (2018): 57-64.

<sup>7</sup> Kamaruddin, "Manajemen Pers Pada Media Masa Dalam Era Reformasi (Studi Penyampaian Dakwah Islam)," *Komunikasi Islam Dan Kehumasan* 2, no. 1 (2018): 127-46; Diah Novianasari and Samsuri, "Peran Media Massa Dalam Meningkatkan Partisipasi Politik Para Aktivis Hmp Pkn Di Yogyakarta," *SOCIA: Jurnal Ilmu-Ilmu Sosial* 13, no. 2 (2016): 13-29, <https://doi.org/10.21831/socia.v13i2.12254>.

<sup>8</sup> Destya Maya Putri and Evawani Elysa Lubis, "Pengaruh Media Sosial Line Webtoon Terhadap Minat Membaca Komik Pada Mahasiswa Universitas Riau," *JOM FISIP* 5, no. 1 (2018): 1-15; Menik Kurnia Siwi, Rita Syofyan, and Annur Fitri Hayati, "Pengembangan Webtoon Sebagai Media Pembelajaran Micro Teaching Di Fakultas Ekonomi Universitas Negeri Padang," *Pakar Pendidikan* 16, no. 1 (2018): 47-59; Suhartini, "Kajian Kearifan Lokal Masyarakat Dalam Pengelolaan Sumber Daya Alam Dan Lingkungan," *Prosiding Seminar Nasional Penelitian, Pendidikan Dan Penerapan MIPA, Fakultas MIPA, Universitas Negeri Yogyakarta*, 2007, 206-18; Annur Fitri Hayati, Oknaryana, and Jean Elikal Marna, "How Is Teachers' Accept on Digital Learning?," in *4th Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2019)*, vol. 124, 2020, 430-34, <https://doi.org/10.2991/aebmr.k.200305.100>.

<sup>9</sup> Dal Yong Jin, "Snack Culture's Dream of Big-Screen Culture: Korean Webtoons' Transmedia Storytelling DAL," *International Journal of Communication* 13 (2019): 2094-2115; Aegyung Shim et al., "Cultural Intermediation and The Basis of Trust Among Webtoon and Webnovel Communities," *Journal Information, Communication & Society* 23, no. 6 (2020): 833-48, <https://doi.org/10.1080/1369118X.2020.1751865>.

<sup>10</sup> Dimas Krisna Aditya Diani Apsari, "The Influence of the Advancement of Social Media in The Visual Language of Indonesian Comics Strips," in *5th Bandung Creative Movement International Conference on Creative Industries 2018 (5th BCM 2018)*, vol. 197, 2019, 156-61, <https://www.atlantispress.com/proceedings/bcm-18/125910929>.

provider application in Indonesia.<sup>11</sup> The popularity of webtoons has spread to novice comic artists. Webtoon readers who have reached millions of readers make it easy for this comic content to spread massively in a short time. Readers can immediately provide assessments and comments on the comics they read.

Nowadays, webtoons are not only used as reading material, but are also starting to be used as promotional media, cultural media and educational media. Several research results on webtoons show that: 1) webtoons are an educational medium in improving users' teaching abilities;<sup>12</sup> 2) Webtoon is a digital comic that is easy to access;<sup>13</sup> 3) Webtoon is a collection of storytelling images published online;<sup>14</sup> 4) Webtoons are published via internet media, usually on sites hosting comics;<sup>15</sup> 5) Line Webtoon is an educational medium appropriate to increase student interest; and can be accessed anywhere;<sup>16</sup> 6) webtoon comics have the potential to increase self-motivation;<sup>17</sup> 7) Webtoon apart from getting interesting things, also gets important things in the form of learning material; 8) its usefulness for students who have moderate achievement in cognitive aspects;<sup>18</sup> dan 9) webtoons can improve the mathematical knowledge of a dyslexic student.<sup>19</sup> Based on this, the development of Webtoon Comics Based on Religious Moderation Values in Batam City Public Middle Schools is very worthy of research."

Based on this background, the aim of this research is to conduct a needs analysis and develop Webtoon-based online comics that can be used as learning resources in State Middle Schools. This research aims to understand the needs of students and teachers regarding the use of online comics in an educational context and to design and develop these comics to suit these needs.

## RESEARCH METHODS

This research is a type of development research. Due to time constraints, this research was limited to the needs analysis stage, specifically on development experience,

---

<sup>11</sup> Siwi, Syofyan, and Hayati, "Pengembangan Webtoon Sebagai Media Pembelajaran Micro Teaching Di Fakultas Ekonomi Universitas Negeri Padang."

<sup>12</sup> Siwi, Syofyan, and Hayati.

<sup>13</sup> Ulliyah Sumanjaya and Regina Tutik Padmaningrum, "Pengembangan Webtoon Kimia Untuk Pembelajaran Materi Kimia Makromolekuler Sebagai Media Belajar Mandiri Siswa," *Jurnal Pembelajaran Kimia* 7, no. 5 (2018): 210-19.

<sup>14</sup> Ji Hyeon Kim and Jun Yu, "Platformizing Webtoons: The Impact on Creative and Digital Labor in South Korea," *Social Media and Society* 5, no. 4 (2019): 1-11, <https://doi.org/10.1177/2056305119880174>.

<sup>15</sup> Dian Bagus Harmoko and Meini Sondang Sumbawati, "Pengembangan Mobile Webtoon Pada Mata Kuliah Pemrograman Game Di Universitas Negeri Surabaya," *IT-EDU* 2, no. 1 (2017): 102-9.

<sup>16</sup> Rian Kuncoro Jati, "Perancangan Media Komik Webtoon Tentang Mata Pelajaran Sejarah (IPS) Kelas 5 SD Di Kota Jogja," in *E-Proceeding of Art & Design*, vol. 4, 2017, 685-94.

<sup>17</sup> Fiona Affeldt, Daniel Meinhart, and Ingo Eilks, "The Use of Comics in Experimental Instructions in a Non-Formal Chemistry Learning Context," *International Journal of Education in Mathematics, Science and Technology* 6, no. 1 (2018): 93-104, <https://doi.org/10.18404/ijemst.380620>.

<sup>18</sup> Shu-Fen Lin and Huann-shyang Lin, "Learning Nanotechnology with Texts and Comics: The Impacts on Students of Different Achievement Levels," *International Journal of Science Education* 7, no. 2 (2016): 1373-91, <https://doi.org/https://doi.org/10.1080/09500693.2016.1191089>.

<sup>19</sup> Tim Lam Toh et al., "Use of Comics to Enhance Students' Learning for The Development of The Twenty-First Century Competencies in The Mathematics Classroom," *Asia Pacific Journal of Education*, 2017, 437-52, <https://doi.org/https://doi.org/10.1080/02188791.2017.1339344>.

knowledge about webtoon comic media, Islamic Religious Education learning conditions, and understanding of teacher and student religious moderation. The subjects in this research were 6 teachers and 124 students, where they had a role as objects in the development of comics. The data collected in this research was obtained through distributing an online questionnaire using Google Form which was distributed to teachers and students. The data analysis technique used is descriptive analysis which is automatically analyzed via Google form output.

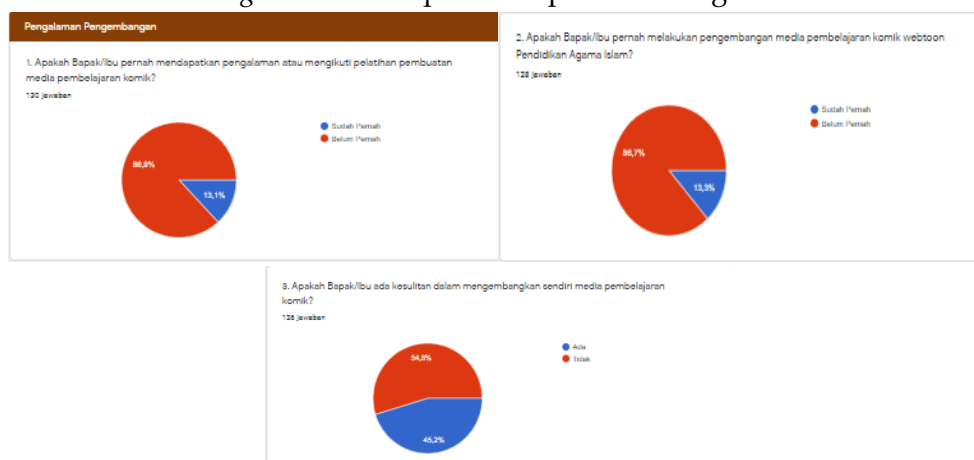
## RESEARCH RESULTS AND DISCUSSION

### Results

The needs analysis in this research is the use of webtoon comic media in PAI learning to increase students' understanding of religious moderation. At this stage, the most important thing to do is identify the need for webtoon comic media through distributing and filling out questionnaires to teachers and students at SMP Negeri 3, SMP Negeri 31 and SMP Negeri 35 Batam. The results of filling out the questionnaire carried out on July 12 2021 can be described as follows:

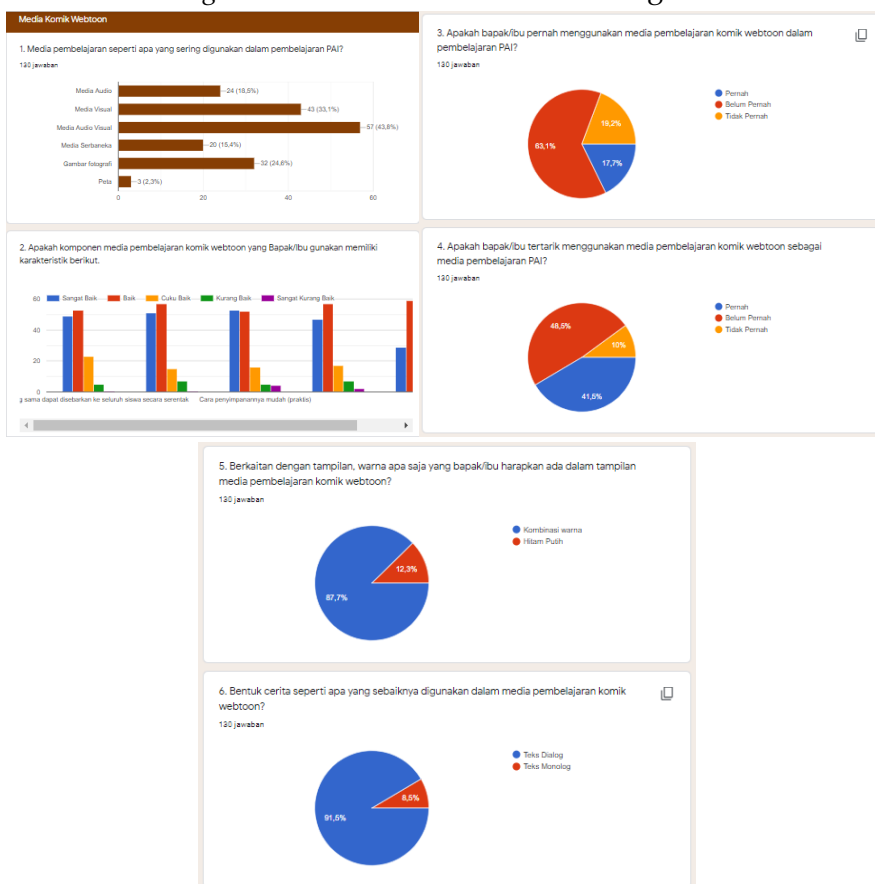
First, development experience is seen from three things, namely: experience in attending training, experience in developing webtoon comic media, and difficulties in developing your own comic learning media. Teachers and students think that 86.9% of teachers and students have never had experience in taking training in making comic learning media. This of course has an impact on the absence of efforts to develop webtoon comic learning media for Islamic Religious Education, where teachers and students said that 86.7% of schools did not use webtoon comics because they had never made an effort to develop webtoon comic learning media for Islamic Religious Education. However, as many as 54.8% said they had no difficulty in developing their own comic learning media. Thus, overall, teachers and students do not have experience in developing media, especially webtoon comic media. For more details, see the following diagram.

Figure 1. Development Experience Diagram



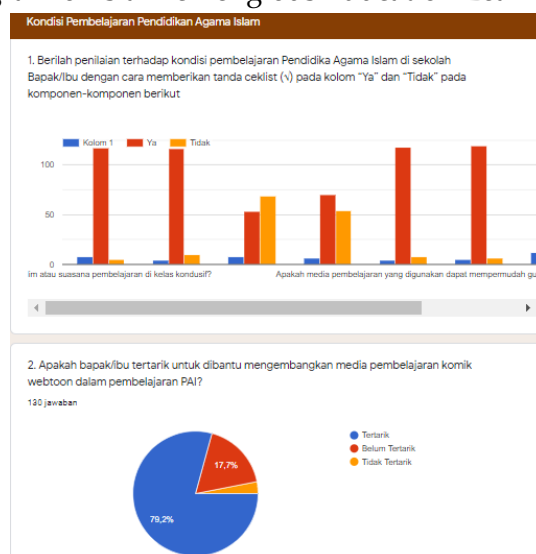
Second, apart from the development experience aspect, another aspect measured is knowledge about webtoon comic media. The results of the analysis show that: 1) audio visual media is more dominantly used in PAI learning, namely 43.8%; 2) the average webtoon comic learning media component is in the GOOD category (55%); 3) 63.1% of teachers and students have never used webtoon comic learning media in PAI learning; 4) teachers and students are interested (41.5%) in using webtoon comic learning media as PAI learning media; 5) 87.7% of teachers and students want a combination of appearance and color in the display of webtoon comic learning media; and 6) 91.5% of teachers and students want a dialogue story form which should be used in webtoon comic learning media.

Figure 2. Webtoon Comic Media Diagram



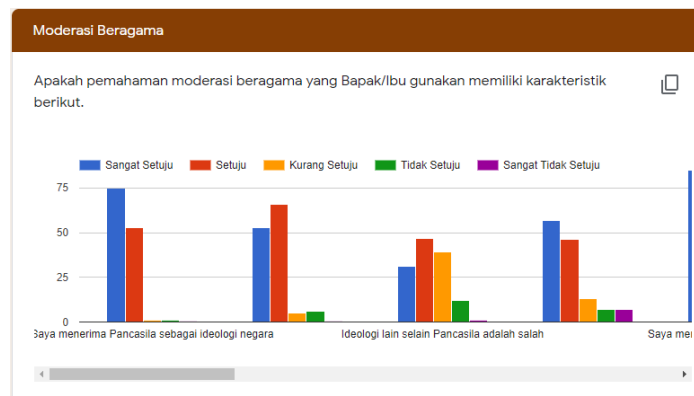
Third, the third aspect analyzed is the learning conditions of Islamic Religious Education. The results of the analysis show that: 1) 90% of the learning climate or atmosphere in the classroom is conducive; 2) 89.23% of the learning media used are interesting; 3) 35.07% of student participation is high; 4) 53.85% level of students' understanding of using learning media; 5) 90.76% of media can guide and motivate students in independent learning; 6) 91.53% of media can make it easier for teachers and students to learn PAI; 7) 76.15% of multicultural values have been implemented in schools; and 8) 60.76% difficulty in making assessments. After knowing the conditions for PAI learning, it turned out that 79.2% of teachers and students were interested in being helped to develop webtoon comic learning media in PAI learning.

Figure 3. Diagram of Islamic Religious Education Learning Conditions



Fourth, the last aspect analyzed is the understanding of teacher and student religious moderation. The results of the analysis show that: 1) 57.6% of teachers and students strongly agree to accept Pancasila as the state ideology; 2) 50.76% of teachers and students agree to respect the diversity of other ideologies that exist in this country; 3) 36.15% of teachers and students agree that ideologies other than Pancasila are wrong; 4) 43.84% of teachers and students strongly agree that defending religion through violence is the wrong way; 5) 65.38% of teachers and students strongly agree that religion does not teach me violence, so I act wisely; 6) 42.31% of teachers and students do not agree with the view that other religions are enemies of my religion, so I must fight them; 7) 38.46% of teachers and students do not agree that they are willing to commit acts of violence on the basis of my religion; 8) 43.84% of teachers and students agree that acts of violence on the basis of religion are not justified; 9) 43.84% of teachers and students agree with religion I was insulted, so I am ready to defend my religion in any way; 10) 59.23% of teachers and students strongly agree that religion teaches me to respect every local culture; 11) 42.31% of teachers and students do not agree that local culture is not permitted in my religion; 12) 52.31% of teachers and students strongly agree that every culture has good values; 13) 56.15% of teachers and students strongly agree to respect existing local cultural diversity; 14) 50.76% of teachers and students agree that if local culture is contrary to my religion, then I still respect that culture; and 15) 54.63% of teachers and students strongly agree that being tolerant with many cultures is the right action.

Figure 4. Understanding Diagram of Religious Moderation



### Discussion

The research results show that the majority of teachers and students do not have experience in taking part in training in creating webtoon comic learning media, consistent with the results of previous research which has identified low levels of training and understanding regarding the use of innovative learning media in educational contexts. Several studies by Nurhayatin et al<sup>20</sup> also note that adequate education and training in this case can be a key factor in increasing the application of learning technology, including webtoon comics, in the educational process.

A previous study found that the majority of teachers had not received adequate training in using innovative learning media.<sup>21</sup> These results reflect the findings in this research that lack of training can be an obstacle in developing the use of webtoon comics in Religious Education learning Islam. Thus, the results of this research provide additional support for the need for better training programs and approaches to developing teacher professionalism in terms of using webtoon comics as an effective learning tool. This can help improve teachers' understanding and skills in developing and integrating webtoon comics in the Islamic Religious Education curriculum, which in turn can improve the quality of learning and student involvement in the educational process.

One of the aspects studied is the preferences and needs of teachers and students related to webtoon comic learning media. The finding that the majority of respondents are interested in using webtoon comic learning media (41.5%) indicates the positive potential in using this media in learning. These results are in line with research highlights the high interest in technology-based learning media in the context of

<sup>20</sup> Titin Nurhayatin, Marlia Marlia, and Desti Fatin Fauziyyah, "Implementasi E-Comics Portable Sebagai Inovasi Media Pembelajaran Bahasa Indonesia," *Jurnal Pesona* 4, no. 1 (2018).

<sup>21</sup> Fitria Mayasari et al., "Pelatihan Komunikasi Efektif Media Pembelajaran Google Classroom Bagi Guru Man 2 Model Pekanbaru," *Jurnal Pengabdian UntukMu NegeRI* 3, no. 1 (2019): 18–23, <https://doi.org/https://doi.org/10.37859/jpumri.v3i1.1155>; Akhmad Riandy Agusta and Cholis Sa'dijah, "Kesiapan Guru Melaksanakan Pembelajaran Berbasis HOTS Ditinjau Dari Pengetahuan Dan Kemampuan Mengemas Perangkat Pembelajaran," *PADARINGAN (Jurnal Pendidikan Sosiologi Antropologi)* 3, no. 2 (2021): 402–24, <https://doi.org/https://doi.org/10.20527/padaringan.v3i2.3422>.



education.<sup>22</sup> Darmawanti<sup>23</sup> research, for example, shows that students' interest in technology-based learning media, including webtoon comics, can increase their involvement in learning.

In addition, the finding that most teachers and students want a combination of appearance and color in webtoon comic learning media (87.7%) and a preference for dialogue story forms (91.5%) provide valuable guidance in the development and design of this media. This is in line with research that highlights the importance of aesthetics and attractive design in visual-based learning media.<sup>24</sup> Overall, the results of this research provide valuable insight into user preferences and needs related to the development of webtoon comic learning media in the PAI context. These results can be used as a basis for designing and developing more effective and interesting learning media in PAI learning, which in turn can increase students' understanding and interest in these subjects.

The research results also show that PAI learning conditions include learning climate, media use, student participation, student understanding, motivation, ease of use, and assessment. The results of this research show that most aspects of PAI learning conditions are assessed positively by teachers and students. However, there are difficulties in carrying out assessments. This finding is in line with the findings that identified challenges in measuring learning outcomes using digital media.<sup>25</sup> Therefore, previous research can provide guidance on effective assessment strategies in the use of webtoon comics. Apart from that, the results of this research also show the interest and desire of teachers and students to develop webtoon comic learning media in PAI learning. This can be an opportunity to increase the use of innovative media in PAI learning process. Thus, the results of this research can be strengthened by previous research that strengthens these findings, so that it can provide a strong foundation for further development in the use of webtoon comics in PAI learning in schools.

The results of this research also reveal various aspects related to understanding the religious moderation of teachers and students in the context of Islamic Religious Education. These aspects include views on state ideology, respect for ideological diversity, views on other ideologies, attitudes towards violence on the basis of religion, views on insults to religion, attitudes towards local culture, and attitudes of tolerance towards various cultures. The main finding from the results of this research is that the

---

<sup>22</sup> Nur Zazin and Muhammad Zaim, "Media Pembelajaran Agama Islam Berbasis Media Sosial Pada Generasi-Z," in *Proceeding Antasari International Conference*, vol. 1, 2020.

<sup>23</sup> A A S Darmawanti, "Aplikasi Webtoon Sebagai Media Pembelajaran Membaca," *Jurnal Pendidikan Dan Pembelajaran Bahasa Indonesia* 11, no. 2 (2022): 201-9, [https://doi.org/https://doi.org/10.23887/jurnal\\_bahasa.v11i2.773](https://doi.org/https://doi.org/10.23887/jurnal_bahasa.v11i2.773).

<sup>24</sup> Rizki Auliazmi, Ganal Rudiyanto, and R Drajatno Widi Utomo, "Kajian Estetika Visual Interface Dan User Experience Pada Aplikasi Ruangguru Aesthetic Studies Of Visual Interface And User Experience Of The Ruangguru Application," *Jurnal Seni Dan Reka Rancang: Jurnal Ilmiah Magister Desain* 4, no. 1 (2021): 21-36.

<sup>25</sup> Rayinda Dwi Prayogi, "Kecakapan Abad 21: Kompetensi Digital Pendidik Masa Depan," *Manajemen Pendidikan* 14, no. 2 (2020), <https://doi.org/https://doi.org/10.23917/jmp.v14i2.9486>; Wisnu Surya Wardhana, "Strategi Pengembangan Kompetensi Guru Secara Mandiri Di Era Literasi Digital," in *Prosiding Seminar Nasional Bahasa Dan Sastra Indonesia (SENASBASA)*, vol. 4, 2020, <https://doi.org/https://doi.org/10.22219/.v4i1.3704>.

majority of teachers and students show a positive attitude towards religious moderation.<sup>26</sup> They accept Pancasila as the state ideology, respect ideological diversity, reject violence on the basis of religion, and are willing to respect different local cultures. Apart from that, most also have a tolerant attitude towards various cultures.

This finding can be strengthened by the results of research which highlighting issues related to religious moderation.<sup>27</sup> Previous research may have identified factors that influence religious moderation attitudes, strategies to increase them, and their impact in educational contexts. Overall, this understanding of religious moderation has important relevance in education, especially in the context of Islamic Religious Education. Teachers and students who have an attitude of religious moderation tend to be more open to diversity, more accepting of state ideology, and more tolerant of different cultures and religions. Therefore, educational approaches that encourage religious moderation can contribute positively to the formation of these attitudes in society.

## CONCLUSION

From the research results, it can be seen that: 1) teachers and students do not have experience in developing media, especially webtoon comic media; 2) teachers and students have never used webtoon comic learning media in PAI learning but want a combination of appearance and color and want a dialogue story form; 3) it turns out that 79.2% of teachers and students are interested in being helped to develop webtoon comic learning media in PAI learning; and 4) understanding of religious moderation by teachers and students is in the GOOD category because on average teachers and students choose the alternative answer of agree. Because this article was only carried out at the needs analysis stage, the author then provides suggestions so that it can be continued in the next steps so that it will produce a good webtoon comic media product to help increase students' understanding of religious moderation at State Middle Schools in Batam City.

## REFERENCES

- Affeldt, Fiona, Daniel Meinhart, and Ingo Eilks. "The Use of Comics in Experimental Instructions in a Non-Formal Chemistry Learning Context." *International Journal of Education in Mathematics, Science and Technology* 6, no. 1 (2018): 93-104. <https://doi.org/10.18404/ijemst.380620>.
- Agusta, Akhmad Riandy, and Cholis Sa'dijah. "Kesiapan Guru Melaksanakan Pembelajaran Berbasis HOTS Ditinjau Dari Pengetahuan Dan Kemampuan Mengemas Perangkat Pembelajaran." *PADARINGAN (Jurnal Pendidikan Sosiologi Antropologi)* 3, no. 2 (2021): 402-24. <https://doi.org/https://doi.org/10.20527/padaringan.v3i2.3422>.

---

<sup>26</sup> Agus Akhmedi, "Moderation of Religious Madrasah Teachers," *Inovasi-Jurnal Diklat Keagamaan* 16, no. 1 (2022): 60-69, <https://doi.org/https://doi.org/10.52048/inovasi.v16i1.294>; Ahmad Yusuf Prasetiawan and Lisadiyah Marifatani, "Sikap Keberagamaan Siswa Di Sekolah Islam Terpadu," *Jurnal Pendidikan Agama Islam Al-Thariqah* 6, no. 2 (2021): 432-43, [https://doi.org/https://doi.org/10.25299/al-thariqah.2021.vol6\(2\).7760](https://doi.org/https://doi.org/10.25299/al-thariqah.2021.vol6(2).7760).

<sup>27</sup> Prasetiawan and Marifatani, "Sikap Keberagamaan Siswa Di Sekolah Islam Terpadu."

- Akhmadi, Agus. "Moderation of Religious Madrasah Teachers." *Inovasi-Jurnal Diklat Keagamaan* 16, no. 1 (2022): 60–69. <https://doi.org/https://doi.org/10.52048/inovasi.v16i1.294>.
- Auliazmi, Rizki, Ganal Rudiyanto, and R Drajatno Widi Utomo. "Kajian Estetika Visual Interface Dan User Experience Pada Aplikasi Ruangguru Aesthetic Studies Of Visual Interface And User Experience Of The Ruangguru Application." *Jurnal Seni Dan Reka Rancang: Jurnal Ilmiah Magister Desain* 4, no. 1 (2021): 21–36.
- Darlis. "Mengusung Moderasi Islam Di Tengah Masyarakat Multikultur." *Rausyan Fikr* 13, no. 2 (2013): 225–53.
- Darmawanti, A A S. "Aplikasi Webtoon Sebagai Media Pembelajaran Membaca." *Jurnal Pendidikan Dan Pembelajaran Bahasa Indonesia* 11, no. 2 (2022): 201–9. [https://doi.org/https://doi.org/10.23887/jurnal\\_bahasa.v11i2.773](https://doi.org/https://doi.org/10.23887/jurnal_bahasa.v11i2.773).
- Diani Apsari, Dimas Krisna Aditya. "The Influence of the Advancement of Social Media in The Visual Language of Indonesian Comics Strips." In *5th Bandung Creative Movement International Conference on Creative Industries 2018 (5th BCM 2018)*, 197:156–61, 2019. <https://www.atlantis-press.com/proceedings/bcm-18/125910929>.
- Harmoko, Dian Bagus, and Meini Sondang Sumbawati. "Pengembangan Mobile Webtoon Pada Mata Kuliah Pemrograman Game Di Universitas Negeri Surabaya." *IT-EDU* 2, no. 1 (2017): 102–9.
- Hayati, Annur Fitri, Oknaryana, and Jean Elikal Marna. "How Is Teachers' Accept on Digital Learning?" In *4th Padang International Conference on Education, Economics, Business and Accounting (PICEBA-2 2019)*, 124:430–34, 2020. <https://doi.org/10.2991/aebmr.k.200305.100>.
- Hermawan. "Nilai Moderasi Islam Dan Internalisasinya." *Insania* 25, no. 1 (2020): 31–43.
- Jati, Rian Kuncoro. "Perancangan Media Komik Webtoon Tentang Mata Pelajaran Sejarah (IPS) Kelas 5 SD Di Kota Jogja." In *E-Proceeding of Art & Design*, 4:685–94, 2017.
- Jin, Dal Yong. "Snack Culture's Dream of Big-Screen Culture: Korean Webtoons' Transmedia Storytelling DAL." *International Journal of Communication* 13 (2019): 2094–2115.
- Kamaruddin. "Manajemen Pers Pada Media Masa Dalam Era Reformasi (Studi Penyampaian Dakwah Islam)." *Komunikasi Islam Dan Kehumasan* 2, no. 1 (2018): 127–46.
- Kim, Ji Hyeon, and Jun Yu. "Platformizing Webtoons: The Impact on Creative and Digital Labor in South Korea." *Social Media and Society* 5, no. 4 (2019): 1–11. <https://doi.org/10.1177/2056305119880174>.
- Lestari, Gina. "Bhinneka Tunggal Ika : Khasanah Multikultural." *Jurnal Pendidikan Pancasila Dan Kewarganegaraan* 1, no. 1 (2015): 31–37.
- Lin, Shu-Fen, and Huann-shyang Lin. "Learning Nanotechnology with Texts and Comics: The Impacts on Students of Different Achievement Levels." *International Journal of Science Education* 7, no. 2 (2016): 1373–91. <https://doi.org/https://doi.org/10.1080/09500693.2016.1191089>.
- Mayasari, Fitria, Desliana Dwita, Jupendri Jupendri, Jayus Jayus, Nazhifah Nazhifah, Khusnul Hanafi, and Nolly Medya Putra. "Pelatihan Komunikasi Efektif Media Pembelajaran Google Classroom Bagi Guru Man 2 Model Pekanbaru." *Jurnal Pengabdian UntukMu NegeRI* 3, no. 1 (2019): 18–23. <https://doi.org/https://doi.org/10.37859/jpumri.v3i1.1155>.
- Novianasari, Diah, and Samsuri. "Peran Media Massa Dalam Meningkatkan Partisipasi

- Politik Para Aktivis Hmp Pkn Di Yogyakarta." *SOCIA: Jurnal Ilmu-Ilmu Sosial* 13, no. 2 (2016): 13–29. <https://doi.org/10.21831/socia.v13i2.12254>.
- Nurhayatin, Titin, Marlia Marlia, and Desti Fatin Fauziyyah. "Implementasi E-Comics Portable Sebagai Inovasi Media Pembelajaran Bahasa Indonesia." *Jurnal Pesona* 4, no. 1 (2018).
- PPIM. *Api Dalam Sekam: Keberagaman Gen Z (Survei Nasional Tentang Sikap Keberagaman Di Sekolah Dan Universitas Di Indonesia)*. Jakarta: UIN Syarif Hidayatullah Jakarta, 2017.
- Prasetiawan, Ahmad Yusuf, and Lisadiyah Marifatani. "Sikap Keberagaman Siswa Di Sekolah Islam Terpadu." *Jurnal Pendidikan Agama Islam Al-Thariqah* 6, no. 2 (2021): 432–43. [https://doi.org/https://doi.org/10.25299/al-thariqah.2021.vol6\(2\).7760](https://doi.org/https://doi.org/10.25299/al-thariqah.2021.vol6(2).7760).
- Prayogi, Rayinda Dwi. "Kecakapan Abad 21: Kompetensi Digital Pendidik Masa Depan." *Manajemen Pendidikan* 14, no. 2 (2020). <https://doi.org/https://doi.org/10.23917/jmp.v14i2.9486>.
- Putri, Destya Maya, and Evawani Elysa Lubis. "Pengaruh Media Sosial Line Webtoon Terhadap Minat Membaca Komik Pada Mahasiswa Universitas Riau." *JOM FISIP* 5, no. 1 (2018): 1–15.
- Rosyid, Halimur, Ahmad Sholikin, and Moh Sa'diyin. "Intoleransi, Radikalisme Dan Terorise Di Lamongan." *Jurnal Polinter: Kajian Politik Dan Hubungan Internasional* 4, no. 1 (2018): 1–20.
- Shim, Aegyung, Brian Yecies, Xiang (Tony) Ren, and Dingkun Wang. "Cultural Intermediation and The Basis of Trust Among Webtoon and Webnovel Communities." *Journal Information, Communication & Society* 23, no. 6 (2020): 833–48. <https://doi.org/10.1080/1369118X.2020.1751865>.
- Sholikin, Ahmad. "Kabupaten Lamongan." *Journal of Governance* 3, no. 3 (2018): 57–64.
- Siwi, Menik Kurnia, Rita Syofyan, and Annur Fitri Hayati. "Pengembangan Webtoon Sebagai Media Pembelajaran Micro Teaching Di Fakultas Ekonomi Universitas Negeri Padang." *Pakar Pendidikan* 16, no. 1 (2018): 47–59.
- Suhartini. "Kajian Kearifan Lokal Masyarakat Dalam Pengelolaan Sumber Daya Alam Dan Lingkungan." *Prosiding Seminar Nasional Penelitian, Pendidikan Dan Penerapan MIPA, Fakultas MIPA, Universitas Negeri Yogyakarta, 2007*, 206–18.
- Sumanjaya, Ulliyah, and Regina Tutik Padmaningrum. "Pengembangan Webtoon Kimia Untuk Pembelajaran Materi Kimia Makromolekuler Sebagai Media Belajar Mandiri Siswa." *Jurnal Pembelajaran Kimia* 7, no. 5 (2018): 210–19.
- Toh, Tim Lam, Lu Pien Cheng, Siew Yin Ho, Heng Jiang, and Kang Ming Lim. "Use of Comics to Enhance Students' Learning for The Development of The Twenty-First Century Competencies in The Mathematics Classroom." *Asia Pacific Journal of Education*, 2017, 437–52. <https://doi.org/https://doi.org/10.1080/02188791.2017.1339344>.
- Wardhana, Wisnu Surya. "Strategi Pengembangan Kompetensi Guru Secara Mandiri Di Era Literasi Digital." In *Prosiding Seminar Nasional Bahasa Dan Sastra Indonesia (SENASBASA)*, Vol. 4, 2020. <https://doi.org/https://doi.org/10.22219/.v4i1.3704>.
- Zazin, Nur, and Muhammad Zaim. "Media Pembelajaran Agama Islam Berbasis Media Sosial Pada Generasi-Z." In *Proceeding Antasari International Conference*, Vol. 1, 2020.