Development of Comic Media to Enhance Knowledge and Attitudes of Adolescent Girls Towards Personal Hygiene

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ABSTRACT:
Introduction: This research aims to explore and design a comic book cover design that can attract the attention of adolescents, considering input from a Focus Group Discussion (FGD). Visual style and aesthetics of the comic are considered crucial to engage the primary target audience, which is adolescents.

Materials & Methods: This study used a qualitative approach to explore the development of an Islamic-themed comic suitable for the pesantren (Islamic boarding school) community. The research employed a Focus Group Discussion (FGD) approach to gather input and preferences from adolescents regarding the cover design, characters, storyline, and visual aesthetics of the comic. The FGD discussion results were then used as a basis to design a comic that aligns with the target audience.

Results: The development of an Islamic-themed comic for the pesantren community requires attention to several critical aspects. First, the comic must prioritize the conveyance of moral messages and Islamic teachings through its visual aesthetics, featuring scenes that reflect the ethics, morality, and religious practices upheld by the pesantren. The use of widely recognized Islamic symbols, such as Arabic calligraphy and Islamic emblems, can reinforce the Islamic identity of the comic. The selection of warm and neutral colors is also essential to create an atmosphere of peace and tranquility, which is characteristic of the religious context. A simpler, cleaner, and more realistic artistic style is generally preferred by the pesantren community. Attention to representational ethics, such as the selection of modest clothing and character appearances that reflect propriety and dignity, must also be considered. Finally, the visual aesthetics of the comic should reflect the local cultural context of the pesantren, to enrich the visual experience of the readers and strengthen the identity of the pesantren. The FGD results emphasize that the comic book cover design should be simple yet appealing, using vibrant colors that can captivate adolescents. The Japanese or Korean anime visual style is considered most suitable to the current tastes of adolescents. However, Islamic values must be maintained, such as in the character's appearance and attitude, which should reflect an Islamic personality. Furthermore, the main character of the comic should embody a diligent and positive female role model to inspire adolescent readers. The storyline is designed to provide a comprehensive and educational narrative about personal hygiene in the life of a pesantren.

Conclusion: The findings of this research emphasize the importance of a simple yet appealing comic book cover design, utilizing Japanese or Korean anime styles to capture the attention of adolescents while still maintaining Islamic values. The visual aesthetics of the comic must reflect the moral message of Islam through the use of Islamic symbols, appropriate color choices, and a simple yet realistic art style.

KEYWORDS: Islamic-themed comic, Pesantren (Islamic boarding school), Comic book cover design, Visual aesthetics, Focus group discussion (FGD), Adolescent preferences, Islamic values and symbols

INTRODUCTION
Personal hygiene is an important aspect in maintaining health, especially for adolescent girls. Good personal hygiene practices not only help prevent various contagious diseases, but can also boost self-confidence and quality of life[1]. Unfortunately, there are still many adolescent girls who lack good knowledge and attitudes towards personal hygiene[2], [3]. According to the 2018 Basic Health Research (Riskesdas) data, only 58.2% of adolescent girls in Indonesia have good knowledge about menstrual hygiene. This indicates that many adolescent girls still do not understand the importance of maintaining personal cleanliness, especially during menstruation. Furthermore, a study conducted by the Ministry of Health in 2020 found that around 40% of adolescent girls in Indonesia still have poor attitudes towards personal hygiene practices. The low knowledge and attitudes of adolescent girls towards personal hygiene can have a negative impact on their health[3], [4], [5]. Lack of understanding about maintaining personal
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cleanliness can increase the risk of urinary tract infections, vaginal discharge, and even cervical cancer. In addition, poor attitudes towards personal hygiene can also cause feelings of embarrassment, low self-esteem, and even depression in adolescent girls. One effort that can be made to improve the knowledge and attitudes of adolescent girls towards personal hygiene is through health education. Effective health education must use media that is attractive and easily understood by adolescent girls[6], [7], [8]. One of the media that can be used is comic media. Comics are a visual medium that combines images and text to convey information or stories. Comics have several advantages, including: (1) can attract the attention and interest of readers, (2) easy to understand, (3) can convey messages effectively, and (4) can improve the reader's memory. The development of this comic media will be carried out by involving adolescent girls as the target audience[1], [2], [3], [9], [10].

The development process will begin by conducting a needs assessment to determine the current level of knowledge and attitudes of adolescent girls, as well as what they expect from the comic media to be developed. Subsequently, the development team will design the script, illustrations, and layout of the comics based on the results of the needs analysis. Previous studies have also shown that the use of comic media is effective in improving individual knowledge and attitudes, including in the health sector. Several research findings indicate that the use of comic media can effectively improve individual knowledge and attitudes, particularly in the health sector[11], [12], [13]. Hamida et al. (2012) found that health education comics can improve elementary school students' understanding of the importance of hand washing, brushing teeth, and other healthy living habits[14]. In addition, the study by Utami and rodiah (2024) reported that comics can effectively increase individual knowledge on various health topics, such as personal hygiene and reproductive health[14]. In terms of attitude and behavior change, ayu et al. (2022) showed that comics discussing reproductive health can improve adolescents' positive attitudes towards safe and responsible sexual behavior[15]. The study by subhi (2019) also found that health comics can motivate individuals to adopt healthy lifestyles, such as regular physical activity and nutritious food consumption[16]. Furthermore, the research by kusnanto (2021) stated that readers, especially children and adolescents, tend to be more interested and engaged when reading health education comics compared to traditional learning media, and consider comics to be more attractive, interactive, and easy to understand[4]. However, currently there is no comic media specifically designed to improve the knowledge and attitudes of adolescent girls towards personal hygiene. Therefore, the development of comic media that can be an effective educational tool in improving adolescent girls' understanding of personal hygiene is necessary.

METHODS

This research uses a qualitative approach to explore the development of Islamic-themed comics that are suitable for the pesantren (Islamic boarding school) community. The qualitative method was chosen because it allows for a deeper understanding of the preferences, perceptions, and expectations of the pesantren community towards the visual representation in Islamic comics. Data was collected through in-depth interviews with pesantren leaders, senior teachers, pesantren students from various levels, as well as experienced comic artists and graphic designers who have developed religious comics. In addition to interviews, data was also obtained through field observations in the pesantren environment to observe religious practices and pesantren culture that may influence the visual aesthetics of comics. The collected data was analyzed thematically to identify the main themes related to the criteria of the visual aesthetics of Islamic comics that are appropriate to the pesantren context. The analysis was carried out by open coding, axial coding, and selective coding to produce categories and subcategories that reflect the perspectives of the informants. Data validity was improved through source and method triangulation, as well as member checking by confirming the analysis results with several key informants to ensure the accuracy of the interpretation. This research also considers ethical principles, including obtaining written consent from the informants, maintaining data confidentiality, and ensuring that the research does not have a negative impact on the participants.

RESULTS AND DISCUSSION

Cover Design of the Comics

The Focus Group Discussion (FGD) conducted as part of this research emphasized the importance of a comic cover design that can attract the attention of adolescents. According to the FGD participants, the comic cover design should be simple yet appealing, with colors that appear natural and vibrant to captivate the target audience, which is mostly adolescents. The use of the right colors can play a crucial role in attracting attention and creating a strong first impression. The cover design suggested by the FGD participants can adopt the Japanese or Korean anime style, given the popularity and aesthetic appeal of this style among today's adolescents. The anime style is known for its dynamic and expressive visual characteristics, which can make the comic cover more attractive and relevant for adolescents. However, while using the anime style, it is important to maintain Islamic values in the design. This means that even though the visuals may be modern and appealing, Islamic elements must be preserved, such as the appearance of characters that adhere to Islamic norms, including the wearing of headscarves and an attitude that reflects an Islamic personality. The combination of the visual style preferred by adolescents with Islamic elements is expected to create a comic cover that is not
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only aesthetically appealing but also conveys a message consistent with the values to be communicated through the comic

Main Character
Considering input from the Focus Group Discussion (FGD), the proposed main character of the comic must reflect a diligent and positive female figure. The choice of a female character is not without reason, as women are often used as role models in various stories due to their ability to demonstrate strength, perseverance, and good morals. A diligent female figure will be able to inspire readers, especially adolescents, to develop good habits in their daily lives. A diligent character also reflects discipline and responsibility, two values that are highly valued in pesantren (Islamic boarding school) life and Islamic life in general. Furthermore, the main character must have a strong positive disposition. This positive disposition is not only limited to good behavior, but also includes an optimistic attitude and the ability to overcome challenges in a constructive manner. A character with a positive disposition can serve as a role model for young readers, teaching them to see the bright side in every situation and continue striving to achieve their goals despite obstacles. A positive attitude will also help build a narrative that is full of hope and inspiration, which is important in educating and shaping the character of the readers. The selection of a name for the main character is also very important. The chosen name must be Islamic or a common everyday name that is easily remembered by teenagers. Islamic names have strong spiritual and cultural values, which can strengthen the character's identity and reinforce the moral message of the story. Names such as Aisyah, Fatimah, or Zahra, for example, are not only easy to remember but also carry a strong positive connotation in the Islamic cultural context. However, it is important to avoid names with strong social connotations. In the Acehnese cultural context, for instance, names such as "Cut" or "Icut" are often associated with certain social status. The use of names with high social connotations can create a hierarchical impression and disrupt the sense of equality that the story aims to achieve. Neutral and common names will be more inclusive and can be accepted by various groups, ensuring that all readers can feel connected to the main character without perceiving any social distance created by the name. In addition, simple and familiar everyday names can also help readers feel more connected and engaged with the main character, making the story more relatable and easy to follow. However, it is important to avoid names with strong social connotations, as they can create a hierarchical impression and disrupt the sense of equality that the story aims to achieve. With a diligent, positive main character with an easily remembered and neutral name, this comic is expected to provide a good role model for adolescents. This character will not only inspire readers to become better in their daily lives, but also create a strong and empathetic connection between the readers and the story, reinforcing the moral message that the story aims to convey.

Story Flow
The story flow of the comic about personal hygiene discussed in the Focus Group Discussion (FGD) is designed to provide a comprehensive and educational narrative. This comic will start from the home environment, telling the story of the main character's preparation to enter the pesantren (Islamic boarding school), then continue with facing daily problems relevant to life in the pesantren, and end with how the main character resolves the problem with a good solution. In addition, this story flow will also be accompanied by visual aesthetic elements that are in accordance with Islamic values and the pesantren understanding. The following is a table that summarizes the story:

<table>
<thead>
<tr>
<th>No</th>
<th>Story Part</th>
<th>Deskripsjon</th>
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<tbody>
<tr>
<td>1</td>
<td>Preparation to Enter the Pesantren</td>
<td>The story begins at home, where the main character is preparing to enter the pesantren (Islamic boarding school). This preparation involves activities such as packing, preparing personal items including hygiene tools, and saying goodbye to the family. These moments depict the supportive family dynamics, as well as the hopes and concerns felt by the main character. The comic introduces the importance of personal hygiene as part of the preparation to enter the pesantren, for example, through the advice of the parents.</td>
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<tr>
<td>2</td>
<td>Facing Daily Problems in the Pesantren</td>
<td>After arriving at the pesantren, the main character begins to face various daily challenges and problems relevant to life in the pesantren. One of the main focuses is the issue of personal hygiene, such as facing the challenge of maintaining cleanliness in a crowded environment, limited facilities, and managing time to stay clean. Internal conflicts, such as discomfort with sanitary conditions or homesickness, are also highlighted, showcasing the realities of life in the pesantren. These problems will make the story more relatable to the readers and provide an</td>
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The story begins by introducing the main character who is preparing to enter life at the pesantren (Islamic boarding school). Various preparations are shown, such as packing, getting personal supplies including hygiene items, and saying goodbye to the family. These moments depict the supportive family dynamics, as well as the hopes and concerns felt by the main character. The comic also introduces the importance of personal hygiene as part of the preparation to enter the pesantren, such as through parental advice. After arriving at the pesantren, the main character starts to face various daily challenges and problems relevant to life in the pesantren. One of the main focuses is the issue of personal hygiene, such as facing challenges in maintaining cleanliness in a crowded environment, limited facilities, and managing time to stay clean. Internal conflicts like discomfort with sanitation conditions or homesickness are also highlighted, showing the realities of life in the pesantren. These problems will make the story more relatable to the readers and provide opportunities to explore the application of Islamic values and personal hygiene principles. Despite facing various challenges, the main character will demonstrate diligence and creativity in solving hygiene-related problems in the pesantren. For example, by finding ways to manage bathing time more efficiently, collaborating with friends, and applying Islamic principles in maintaining cleanliness. The process of solving these problems is written in an inspiring way, showing the growth and development of the main character. The story emphasizes the importance of community support and steadfastness of faith in solving problems to provide a strong moral message to the readers, as well as presenting good solutions and the application of Islamic values to serve as a positive example and educational purpose.

Visual Aesthetics of the Comic

In the FGD, the importance of visual aesthetic elements was discussed in developing a comic that aligns with the values of the pesantren. This requires a deep understanding of Islamic principles and local culture prevalent in the pesantren environment. In developing the visual aesthetics of the comic, there are several key considerations that must be addressed to ensure compatibility with the pesantren's beliefs:

Table 2: FGD Outcomes Related to the Visual Aesthetics of the Comic

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<th>No</th>
<th>Consideration</th>
<th>Explanation</th>
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<tr>
<td>1</td>
<td>Emphasis on Islamic Values</td>
<td>The comic must prioritize the conveyance of moral messages and Islamic teachings through its visual aesthetics. This can be achieved by strengthening the visualization of scenes that reflect the ethics, morality, and religious practices upheld by the pesantren, such as worship activities, religious studies, or the implementation of values of solidarity and togetherness.</td>
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<td>2</td>
<td>Use of Islamic Symbols</td>
<td>The visual aesthetics of the comic can be enriched through the use of Islamic symbols that are widely recognized in the pesantren community. Symbols such as Arabic calligraphy, Islamic emblems, or images from the Quran and Hadith can be used to reinforce the Islamic identity of the comic and build an emotional connection with the readers.</td>
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<tr>
<td>3</td>
<td>Appropriate Color Selection</td>
<td>The colors used in the comic must be carefully selected to create an atmosphere that is consistent with the theme and message to be conveyed. Warm and neutral colors are often preferred as they create a sense of peace and tranquility that is characteristic of the religious context.</td>
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<table>
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<th>Suitable Artistic Style</th>
<th>Attention to Representational Ethics</th>
<th>Local Cultural Context</th>
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<tr>
<td>4</td>
<td>The artistic style used in drawing the characters and backgrounds must be in line with the preferences and visual tastes of the pesantren community. A simpler, cleaner, and more realistic aesthetic may be preferred over a style that is too experimental or expressionistic.</td>
<td>When drawing the characters, it is necessary to pay attention to the ethics of representation that respect the moral values and Islamic culture. This includes the selection of modest and Shariah-compliant clothing, as well as character appearances that reflect propriety and dignity in social interactions.</td>
<td>The visual aesthetics must also reflect the local cultural context in which the pesantren is located. This can include the use of traditional architectural elements, natural landscapes, or other local cultural elements that strengthen the identity of the pesantren and enrich the visual experience of the readers.</td>
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The development of Islamic-themed comics for the pesantren community must consider several important factors. First, the comics must prioritize the conveyance of moral messages and Islamic teachings through its visual aesthetics, by depicting scenes that reflect the ethics, morality, and religious practices firmly upheld by the pesantren. Additionally, the use of widely recognized Islamic symbols, such as Arabic calligraphy and Islamic emblems, can strengthen the Islamic identity of the comics and build an emotional connection with the readers. The selection of warm and neutral colors is also crucial to create an atmosphere of peace and tranquility that is appropriate for the religious context. A simpler, cleaner, and more realistic art style is generally preferred by the pesantren community over a more experimental approach. Attention to ethical representation, such as the selection of modest attire and character appearances that reflect propriety, must also be considered. Lastly, the visual aesthetics of the comics should reflect the local cultural context of the pesantren, to enrich the visual experience of the readers and reinforce the identity of the pesantren. By considering all of these factors in the design of the visual aesthetics of the comics, it is expected that a profound and meaningful reading experience can be created for readers from the pesantren community. This allows the comics to become an effective tool in educating, inspiring, and entertaining the readers in an Islamic and constructive manner.

### CONCLUSIONS

The findings of this research emphasize the importance of a simple yet appealing comic book cover design, utilizing Japanese or Korean anime styles to capture the attention of adolescents while still maintaining Islamic values. The proposal is to feature a diligent and positive main character as a role model to inspire adolescents to develop good habits and strong morals. The storyline about personal hygiene is designed to provide an educational narrative, starting from the preparation for entering an Islamic boarding school to facing and resolving daily challenges with creative solutions aligned with Islamic principles. The visual aesthetics of the comic must reflect the moral message of Islam through the use of Islamic symbols, appropriate color choices, and a simple yet realistic art style. By considering these elements, the comic is expected to provide a profound, inspiring, and educating reading experience for adolescents in an Islamic and relevant manner.

### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

### REFERENCES

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