IMPACTS OF MANGA ON INDONESIAN READERS’ SELF-EFFICACY AND BEHAVIOR INTENTIONS TO IMITATE ITS VISUALS

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Abstract: This study investigated the reasons behind the phenomenon of young Indonesians who imitate the visuals commonly found within Japanese manga from cognitive aspects by linking emotion, manga visual attractiveness, behavior change and self-efficacy. Utilizing within subjects design, 107 Indonesian youths read both manga comic book, Naruto, and a non-manga comic book, The Adventures of Tintin, in random order and rated their perceived attractiveness and behavioral intentions in imitating each comic’s visuals. The participants also rated their behavioral intentions in imitating their own visual preferences as the control group. Results indicate that manga comic book scored significantly higher in term of perceived attractiveness compared to non-manga comic book. It also indicates there are significant correlations between major source of self-efficacy and behavior intentions in imitating visuals of manga. The majority of participants also mentioned manga as their main personal visual influences. These findings further confirm manga’s visual and emotional attractiveness as the main influence behind the aforementioned imitating phenomenon.

Keywords: Behavior change, perception, emotion, manga, self-efficacy.

1. Introduction

Within less than twenty years from its official introduction in the Indonesian market in 1990, manga has proved its enormous impacts, not only in achieving booming popularity [1, 2] but also to the emergence of young Indonesians who were heavily inspired and adopted visuals commonly found within manga as their own drawing style [3, 4]. Manga also produced a new generation of Indonesian readers: female comic readers, which then were encouraged in becoming female comic artists [5]. Globally, manga’s significant impacts and influences outside Japan had also been widely recognized [6–9].

Ahmad and Zpalarzani [10] analyzed this manga phenomenon as ‘the tipping point’, in which manga fulfilled several contributing factors that transformed it into an unstoppable force of cultural influence. Studies through visual comparison analyses by Sunyoto [3] and Alexander [11] concluded that contemporary Indonesian comic artists were heavily influenced by manga in the term of visual style and storytelling.

Studies on manga had acknowledged its visual distinctiveness [12, 13] and further suggested its advantages in creating deep emotional relationship toward readers through its distinctive visual storytelling [14, 15]. While connecting to the readers and inviting them to participate within the story would be common traits within comics’ medium [16–21], manga has developed different techniques in achieving it. These techniques heavily amplify the sense of reader participation, which emphasizes on the feeling of being part of the story. The ability of transporting audience inside the story’s universe has been recognized as an important factor in influencing audiences [15, 17, 18, 22–25].

The other aspect of manga that positively perceived by readers is its simple and distinctive visual. Manga extensively boasts a combination of iconic characters with
realistic backgrounds. The simple character design enables for easy identification and representation [17] and goes along with how human process visual information [20, 21, 25, 26]. The realistic backgrounds produce a strong sense of place, helping readers to connect with their memories and experiences to form personal relationship with the story universe [15].

It is a usual way to imitate the drawing style of favorite artists as a learning step to learn various drawing style [15]. However, when there are so many participants who participate in imitating manga style of drawing, especially when they come from different cultural background, then it is assumed that manga’s visuals possessed certain attractive values that persuaded this communal behavior. Ahmad and Zpalanzani argued that unlike its Western counterparts that focus deeply on the knowledge of basic human anatomy, manga showcases simple yet stylish characters, made it seems easy to imitate [10]. This ‘easy yet stylish’ factor persuades many readers to draw with manga-like visuals.

Bandura [27] argued that human behavior is shaped and controlled by either environmental influences or internal disposition. Using a triangular model to analyze human behavior, Bandura stated that personal factors, environmental influences and behavior interact and influence each other bi-directionally; and human behavior is guided by cognitive processes rather than reinforced practice. One of the key concepts from this theory is the self-efficacy that relates to one’s confidence in the ability to take and persist in that action [28, 29].

Bandura then developed four major sources of self-efficacy: mastery experience; social modeling; social persuasion and psychological responses with mastery experience, in which a direct experience of being successful in performing a task provides the most powerful source [29].

Self-efficacy also strongly relates to emotion in which emotion plays an important part in human acceptance for an entity. Norman [30] argued that human decision making is dependent on both cognition and affect. Based on the work by Patrick Jordan, Norman further acknowledged the aspect of psycho-pleasure relating the people’s reactions and psychological state during the use of products and the ideo-pleasure which emphasizes on the reflection on the experience in enhancing the emotion arousal. In order to maintain this arousal long lasting, it relies not only in the seduction but also in the skill of the designer in providing a powerful and rich experiments (in this case as manga) and in the skill of the perceiver (Indonesian readers).

Judging by the fact that the manga phenomenon was triggered by manga’s impacts toward its readers, it is suggested to focus on the cognitive aspects of Indonesian readers. Therefore, this study takes further investigations by linking emotion, manga visual attractiveness, behavior change and self-efficacy, by performing experiments in measuring Indonesian readers’ perceived attractiveness and behavior intentions to imitate visuals between manga and non-manga (Figure 1).

2. Research Objective and Hypothesis

This study tried to investigate the phenomenon of emerging young Indonesians who imitated visuals of manga by first looking into whether manga provides higher readers’ perceived attractiveness compared to other comics, as suggested in the literature studies. Second, it tried to explore whether visuals of manga produces higher mastery experience in imitating its visuals. If there are, are these two major sources of self-efficacy contribute significantly toward self-efficacy and output expectancy, enforcing readers’ attitude and behavior intention toward imitating visuals of manga? Last, it tried to investigate whether

![Figure 1. Theoretical model](image-url)
manga also produces higher level of behavior intentions in imitating the visuals compare to non-manga comic books. Two other major sources, the social persuasion and social modeling, are excluded in this study because both cover social aspects which are not being discussed in this study.

Based on these assumptions, we proposed the following four hypotheses:

H1: Manga’s reading experience would produce significantly higher rating in perceived attractiveness compare to the experience in reading non-manga comics.

H2: Manga’s visuals would produce significantly higher rating in mastery experience to imitate the visuals compare to the non-manga’s visuals.

H3: Manga readers’ mastery experience and perceived attractiveness have a significant correlation with self-efficacy and outcome expectancy, which in return would impact the attitudes and behavior intentions in imitating visuals of manga.

H4: Manga’s visuals would produce significantly higher rating in behavior intentions scale to imitate its visuals compare to non-manga’s visuals, closer to readers’ personal preferences.

3. Methodology

3.1. Participants

University students (N=107; 53 male and 54 female; M age=20.8; SD=1.45; range 18-26) of Art and Design program from three universities: Bandung Institute of Technology (ITB), National Institute of Technology (ITENAS) and Maranatha Christian University participated in the experiment. The participants were selected based on suggestion that most of them are still developing their drawing technique, therefore are open for external visual influences. Four participants failed to follow instructions for the questionnaire completion (over 10% of items were skipped) and were excluded from analyses.

Participants mostly have a long relation with comics. From 101 responses, 87.1% has been reading comics for more than three years. 38.8% from 98 participants spent an average between one to two hours reading comics each day, with other 28.6% between 30 to 45 minutes. 21.4% spent less than 30 minutes each day to interact with comics.

3.2. Stimuli

Prior to the experiment, we conducted a questionnaire study to obtain data on Indonesian readers’ perception toward Japanese manga. Results showed that these readers mostly interested in manga with action adventure theme and acknowledged that emotionally expressive effects as the most attractive visuals. Therefore, the stimulus utilized for the study should represent these characteristics: attractive, fitted with suitable theme (action adventure) and expressive emotionally visual content. Non-manga stimulus was also chosen with consideration in representing relatively similar features.

The comic books utilized for this study are Naruto (Masashi Kishimoto, 1999) and The Adventure of Tintin (Herge, 1968). Naruto (issue 53) is a shounen manga (manga for boys) and follows the adventure of young protagonist Naruto Uzumaki in becoming the leader and the strongest Ninja in his village. This particular issue focuses on the meeting between Naruto and his departed mother, who told him the story of his birth and how both of his parents sacrificed their life for him. Approximately 36% of the panels in Naruto contains action scene. It has been listed as the best selling manga for the last three years from the biggest manga publisher in Indonesia. Moreover, result from the questionnaire study also showed Masashi Kishimoto as one of the most influential artists and his artworks has become the role model for the imitating process.

The Adventure of Tintin (issue Flight 714 to Sydney) follows the protagonists’ (Tintin, Captain Haddock and Snowy) adventure in a small island within Indonesian archipelago to prevent a robbery attempt on an eccentric millionaire. Approximately 24% of the panels in Tintin contains action scene. Tintin is also well-known among Indonesian comic readers for its sophisticated visuals and straight adventure story. It was also voted as the most read non-manga comics from previous study. Tintin visuals offered detailed background drawings which were based on factual settings.
Because of the popularity of both comic books within Indonesian readers (as supported by the previous study’s results), the participants were assumed to be familiar with them, especially toward their respective visuals. This should enable them to produce genuine accuracy in measuring their intention in imitating the visuals from each stimulus. Regardless of the comic book condition, all participants read completed storyline.

Based on consideration of the high possibility that both chosen visual stimuli (Naruto and Tintin) still could not represent the visuals being imitated by the participants, we introduced a third stimulus: personal preference. We asked the participants about their main visual inspiration and mentioned the name of the artists. From 103 participants, 72.81% mentioned Japanese comics as their main visual inspirations, followed by non-comics with 40.77%. American and European comics scored lower with 18.45% and 17.47% respectively.

3.3. Design and measurements

The experiment was developed from the theoretical model (Figure 1) and was designed to obtain two dependent measures from three phases of experiment. The first dependent measure was the participants’ perceived attractiveness with two stimuli: manga and non-manga comic books. The second was the participants’ behavior intentions in imitating visuals from three stimuli: manga, non-manga and personal preference.

The experiment utilized within-subjects designs with every participant would take part in all conditions. It was chosen because it is important to obtain results from the same participant for two to three different stimuli. Precautions were made to minimize the problems commonly found with this type of design, by randomizing the stimuli for each participant. For each group of participants, it had been arranged that the number of participants who began with manga and non-manga stimuli were relatively equal.

At the beginning of each experiment session, the participants were brief that the experiment was aimed to rate their responses toward certain comics and whether those comics affected their behavior intentions in shaping their drawing style. The participants then were informed about three phases in this experiment. The first phase required the participants to read the first stimulus, before filing out the questionnaire. The procedure was repeated for second phase, utilizing the second stimulus. The third phase required the participants to fill out the questionnaire based on their previous experience of their personal preferences without on-hand stimuli. The experiment ended after filling out the demographic information and comic interaction history. The participants then were offered small gifts for their participation then were dismissed. The average time needed to complete the whole experiment was ninety minutes.

For the first and second phase, each participant was required to read a volume of a comic book as the stimulus in order to establish a complete reading experience. Participants were allowed to perform their usual manner in reading comics without time limitation. The experiments were performed in a room with normal condition in one meeting room in ITB except the last two sessions which were carried out in in ITENAS and Maranatha Christian University.

3.4. Questionnaire
3.4.1. Psychological responses scale

Perceived attractiveness was measured by utilizing the psychological responses scale. It measured the degree of arousal, the feeling of engagement/participation toward the story, the degree of feeling being inspired, degree of interaction with character(s), degree of social presence, degree of spatial presence and state of emotions form the participants’ interaction from the intended stimulus. The scale was developed from the Temple Presence Inventory (Lombart and Ditton, 2007 as cited in [18]) with additional items adapted from Narrative Engagement Scale [24] and McCloud’s manga visual storytelling techniques [15].

Items for emotional responses within the scale utilized semantic differential which were based on the results of expression feelings after reading manga from the questionnaire result of previous study (N=127). Each selected adjective was accompanied by its bipolar expression.
3.4.2. Behavior intentions scale

The items for behavior intentions scale were developed to measure self-efficacy; mastery experience; outcome expectancy; attitude and behavior intentions dimensions. The questionnaire items were developed from study by Baker-Eveleth and Stone [31]; with Guides for Self-efficacy Scales [32] as an additional reference

4. Results

4.1. Scales’ reliability

A reliability measurement of Cronbach’s Alpha was performed on both psychological responses and behavior intentions scales (Table 1). Psychological responses scale (30 items, N=103) for manga produced a Cronbach’s alpha’s value of 0.960. The measurement for non-manga gave a Cronbach’s alpha’s value of 0.952. Both values suggested a high level of internal consistency for the scale.

The behavior intentions scales of manga (15 items, N=103) produced a Cronbach’s alpha value of 0.910 with the non-manga and personal preferences measurements gave the value of 0.880 and 0.899, respectively. These values also suggested a high level of internal consistency for the scale. However, further analysis showed that the removal of one item on attitude (drawing inspired by this comic did not produce much effect in improving my drawing skills in achieving the level that I want) would produced higher Cronbach’s alpha values (manga=0.928; non manga=0.896; personal preferences=0.919) with low Corrected Item-Total Correlation (manga= –0.088; non manga= –0.051; personal preferences= 0.107). Therefore, this item was excluded from analysis.

Table 1. Reliabilities, means and standard deviations of the psychological responses and behavior intentions scales

<table>
<thead>
<tr>
<th>Measurement Scales</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological responses: manga</td>
<td>.960</td>
<td>4.84</td>
<td>1.14</td>
<td>30</td>
</tr>
<tr>
<td>Psychological responses: non-manga</td>
<td>.952</td>
<td>3.88</td>
<td>1.03</td>
<td>30</td>
</tr>
<tr>
<td>Behavior intentions: manga</td>
<td>.910</td>
<td>4.22</td>
<td>1.21</td>
<td>15</td>
</tr>
<tr>
<td>Behavior intentions: non-manga</td>
<td>.880</td>
<td>4.15</td>
<td>1.00</td>
<td>15</td>
</tr>
<tr>
<td>Behavior intentions: personal preferences</td>
<td>.899</td>
<td>5.44</td>
<td>0.97</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: N=103. The missing values were replaced by the scale mean. All items were measured using 7 points Likert scale (the minimum was 1 and the maximum was 7).

4.2. Perceived attractiveness comparison between manga and non-manga

We conducted paired t-test to test the hypothesis that reading manga would produce higher perceived attractiveness and mastery experience than non-manga comic book. The result for perceived attractiveness was that manga (M=4.84, SD=1.14) and non-manga (M=3.88, SD=1.03) differed significantly with t(102)=6.06, p<.05, two-tailed. Analyses on each of the psychological responses scale’s dimension showed significant differences between manga and non-manga (Table 2) with manga produced significantly higher means for each dimension. Therefore first hypothesis that manga’s reading experience would produce significantly higher rating in perceived attractiveness compare to the experience in reading non-manga comics is supported.

Table 2. Mean differences, t value, degree of freedom and p value from each dimension of psychological responses between manga and non-manga.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean differences</th>
<th>df</th>
<th>p value</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arousal</td>
<td>.68</td>
<td>102</td>
<td>.004</td>
<td>3</td>
</tr>
<tr>
<td>Engagement</td>
<td>1.43</td>
<td>102</td>
<td>.000</td>
<td>5</td>
</tr>
<tr>
<td>Parasaocial interaction</td>
<td>1.42</td>
<td>102</td>
<td>.000</td>
<td>5</td>
</tr>
<tr>
<td>Inspiration</td>
<td>.99</td>
<td>102</td>
<td>.000</td>
<td>3</td>
</tr>
<tr>
<td>Social presence</td>
<td>.84</td>
<td>102</td>
<td>.000</td>
<td>2</td>
</tr>
<tr>
<td>Spatial presence</td>
<td>.55</td>
<td>102</td>
<td>.013</td>
<td>2</td>
</tr>
<tr>
<td>Emotional response</td>
<td>.82</td>
<td>102</td>
<td>.000</td>
<td>10</td>
</tr>
</tbody>
</table>

On the emotional response dimensions utilizing semantic differential, manga mostly produced a significantly positive emotions above non-manga excluding two bipolar scales: Happy–Sad and Inspired–Uninspired. However, the value of Inspired–Uninspired scale was still above non-manga value (Figure 2).

4.3. Mastery experience comparison between manga and non-manga

While the perceived attractiveness did produced significant differences, the mastery experience dimension between manga (M=3.85, SD=1.48) and non-manga (M=3.88, SD=1.43) showed otherwise with t(102)= -.119, p=0.905, two-tailed. The average means value suggested that manga produced lower value than non-manga. A closer analysis on each item showed that manga (M=3.89, SD=1.60) and non-manga (M=4.34, SD=1.72) differed
significantly only on item of ‘I felt drawing with visual style from this comic is a relatively easy thing to do or follow’, t(102) = -2.140, p = .035, two-tailed. Therefore the second hypothesis that manga’s visuals would produce significantly higher rating in mastery experience to imitate the visuals compare to the non-manga’s visuals is not supported.

4.4. Correlation within behavior intentions scales in imitating visuals of manga

To see whether there is significant correlations between perceived attractiveness and mastery experience with behavior intentions (which consisted dimensions of self-efficacy, outcome expectancy, attitude and behavior intentions) in imitating visuals of manga, we conducted a Pearson’s product-moment correlation. Based on the theoretical model (Figure 1), we conducted several correlation analyses in systematic order with manga as the stimulus.

The first analysis was to see relation between perceived attractiveness and mastery experience with self-efficacy and outcome expectancy. The second analysis was correlation measurement between self-efficacy and outcome expectancy whether they produced significant impact toward attitude in imitating visuals of manga. The last analysis was to see whether positive attitude would reinforce behavior intentions in imitating visuals of manga.

Result for the first phase for correlation between perceived attractiveness and mastery experience with self-efficacy and outcome expectancy showed that there was a moderate, positive correlation which was statistically significant (r = 0.530, n = 103, p < .01, two-tailed). The correlation between perceived attractiveness and outcome expectancy also produced moderate, positive correlation and statistically significant (r = 0.619, n = 103, p < .01, two-tailed). For correlation between mastery experience and self-efficacy, the result showed a strong, positive correlation which was statistically significant (r = 0.752, n = 103, p < .01, two-tailed), while the correlation between mastery experience and outcome expectancy also showed a moderate, positive correlation which was statistically significant (r = 0.541, n = 103, p < .01, two-tailed).

Result for the second phase for correlation between self-efficacy and attitude showed that there was a moderate, positive correlation which was statistically significant (r = 0.434, n = 103, p < .01, two-tailed), while the correlation between mastery experience and outcome expectancy also showed a moderate, positive correlation which was statistically significant (r = 0.639, n = 103, p < .01, two-tailed).

Finally, result for the third phase for correlation between attitude and behavior intentions showed that there was a moderate, positive correlation which was statistically significant (r = 0.598, n = 103, p < .01, two-tailed). This result showed that positive attitude would reinforce behavior intentions in imitating visuals of manga. Therefore, the third hypothesis that manga readers’ mastery experience and perceived attractiveness have a significant correlation with self-efficacy and outcome expectancy, which in return would impact the attitudes and behavior intentions in imitating visuals of manga is supported (Figure 2).

4.5. Behavior intentions scale comparison between manga, non-manga and readers’ personal preferences

While the third result supported the third hypothesis, it does not show that manga would produce significant impact in behavior intentions compare to non-manga. The prediction was manga would produced higher score of behavior intentions than non-manga did, closer to the value produced by personal preferences (control group).

A repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean of behavior

**denotes strong positive correlation; and *denotes moderate positive correlation. All results are statistically significant at a 1 % level.

Figure 2. Correlation path in behavior intentions in imitating visuals of manga
intentions scale differed statistically significantly between manga (M=4.22, SD=1.21), non-manga (M=4.15, SD=1.00) and personal visual preferences (M=5.44, SD=0.97) with $F(1.721, 175.549)=71.514$, $p<.01$. Post hoc comparison using the Bonferroni correction however revealed that reading manga did not produced statistically significant difference toward the value of behavior intentions in imitating its visual compared to non-manga ($p=1.00$). The participants’ own personal preference did produce highest degree of behavior intentions in imitating its visuals in comparison to both manga and non-manga (both $p<.05$).

Average means between manga, non-manga and personal visual preference on each dimensions of behavior intentions scale showed similar features, with manga was slightly higher than non-manga on self-efficacy dimensions ($p=1.00$), outcome expectancy dimensions ($p=0.953$), attitude dimensions ($p=1.00$) and behavior intentions dimensions ($p=1.00$) (Figure 3). With these result, we forced to reject fourth hypothesis that manga’s visuals would produce significantly higher rating in behavior intentions scale to imitate its visuals compare to non-manga’s visuals, closer to readers’ personal preferences. However, it is important to notice that the majority of participants (72.81%) acknowledged various manga titles as their main visual inspirations and references.

Figure 3. Means of behavior intentions scale between manga, non-manga and personal preference

4.6. Participants’ familiarity toward visual stimuli

Participants were more familiar with manga visual stimuli utilized for this experiment. 78.3% participants acknowledged that they have read the Naruto series prior to the experiment, compared to 54.4% participants for the Tintin series. 36.9% participants have read more than 25 volumes of Naruto with 53 available volumes when the experiment was performed, which suggested that many of the participants are regular readers of Naruto series. In contrast, only 1% participants read 20-24 volumes of Tintin, from 24 available volumes, with 32% participants only read one to four Tintin volumes.

5. Discussion

5.1. Readers, emotion and manga visual attractiveness

The results support the argument that manga has the advantage in being perceived easily by its readers. From the seven dimensions measured to obtain perceived attractiveness rating, manga excelled in all dimensions compared to non-manga. Engagement and parasocial interaction dimensions, which measured the readers’ level of participation and involvement within the story’s universe and characters interaction, showed the biggest means difference. In this case, manga successfully engages Indonesian readers to both participate and relate to the story and characters more than non-manga could provide. Engagement produces strong feelings toward stories, even toward characters and/or events that actually perceived as non-existence [25]. It is suggested that Indonesian readers found them selves more related with manga visual storytelling techniques devised by McCloud [15], especially toward emotional-related visuals.

Inspiration dimensions also scored large means differences, which confirmed the result obtained from previous study that reading manga enacted the feeling of inspiration among its readers. The manga stimulus used in the experiment (Naruto) dealt with stories about young ninjas’ hard struggle in becoming the strongest ninja of all. This seems affected and inspired the readers; compare with the straight action story of stopping a committed crime from the non-manga stimulus (Tintin). This suggests that Indonesian readers seem to find encouragement and could relate to stories among manga with their own experiences by looking at the essence and context of the story. Gladwell [33] described this attitude as ‘the power of context’ which one of the factors behind the tipping point phenomena.
The smallest means difference was noted on the spatial presence dimensions. This could relate to the fact that both manga and non-manga used on the experiment (Naruto and Tintin) featured very realistic environmental drawings, therefore provided similar level of spatial presence. Detailed backgrounds along with small details further enhanced the vivid experiences of being in the same environment. Both collaborated in building a high degree of immersion [15].

Looking into the result from semantic differential scales, manga provided overall positive emotions with large mean differences compared to non-manga. Readers perceived manga as highly emotional and dynamic, which could relate with the extensive use of subjective motion and emotionally expressive effects. Manga also managed to trigger a wide range of emotion, with readers suggested a relatively sad feeling after reading the manga, a feature that did not show on the non-manga stimulus. In line with arguments that highly emotional scenes tended to trigger relevant emotional feelings, this suggested that emotional feeling triggered by visuals of manga played an important role in manga’s acceptance and influence toward Indonesian readers.

It is interesting to note that in term of visualization, European comics also featured a mixed of cartoon characters with realistic backgrounds in the similar manner of manga [17]. More over, European comic also featured colorful visuals, which portrayed its universe as in the real world, while the visuals of manga were presented in black and white. However, manga still produced high ratings of arousal and emotional responses dimensions. These suggest that emotional impact produced while reading comics are more than just attractive visuals.

Contrasting finding was found in the measurement of mastery experience in imitating visuals of manga and non-manga, with manga produced lower mean scores compared to non-manga. This could be interpreted that imitating visuals of manga was perceived as something difficult to do, while it was predicted otherwise. It is assumed previously that unlike its western counterparts that focused on the knowledge of basic human anatomy, manga focuses on creating simple yet stylish characters, therefore easy to imitate [10].

The stimuli utilize for the experiment could affect the outcome. On one hand, Naruto’s visual utilized detailed drawings, expressive gestures and extreme point of view which showed distorted body proportions; hence it required extra skills in achieving them. The nature of manga appearance in black and white using delicate cross-hatching and screen tones techniques could also be perceived as something difficult to achieve. Detailed drawings in Tintin, on the other hand, were filled with plain colors and utilizing normal gestures and point of view, which could tone down the level of details perceived by the participants.

5.2. Manga and readers’ behavior intentions in imitating its visuals

Taken from the phenomenon of imitating manga visuals, result indicated that beside most of moderate positive correlation between perceived attractiveness, mastery experience, self-efficacy, outcome expectancy; attitude; and behavior intentions; the measurement between mastery experience and self-efficacy produced a strong positive correlation. This acknowledges the strong relation between the positive experiences in imitating visuals of manga into self confidence to continue drawing using the style, a relevance of impact from mastery experience toward self-efficacy as mentioned by Bandura [29]. It is suggested that the readers did find satisfaction in using visuals of manga in their drawing through imitating process, which then impacted their self-efficacy in continuing the imitating behavior. Overall, positive aspects from manga’s perceived attractiveness and mastery experience further affect readers’ self-efficacy and outcome expectancy, in which further reinforces their attitude and behavior intentions in imitating visuals of manga.

However, the comparison of behavior intentions in imitating visuals between manga and non-manga did not produce much difference. It seems there are other factors more than manga visual attractiveness that strongly affected behavior intentions to imitate it.

The chosen stimulus could affect the outcome. On one hand, Naruto comic could be just one style compared to the
vast variations of manga visual style. There is high possibilities that while the readers are emotionally attracted, but to imitate the visuals of Naruto as the role model is a slightly different matter. On the other hand, Tintin comic has been too famously known for its clear-line style and realistic depiction of its universe [17], a similar treat with manga, except for its full color appearance. There is another possibility that the participants were influenced by Tintin’s iconic status, and did not produce their actual attitudes in the experiment. However, these arguments require further investigation.

From the overall results relating readers’ tendencies in being influenced by certain visuals, personal preferences appear to play an important role. Readers are not only engrossed to any attractive visuals but also relate to their own drawing abilities and the feeling of enjoyment in imitating particular visuals that suitable for them. The participants also acknowledged that they had been inspired from more than one particular artist. In average, each participant was inspired from two to three visual artists, with the possibilities that each artist influence particular area in their drawings. It is interesting to note that the majority of participants mentioned visuals from various manga artists that become their role models, which shows the strong influence provided by manga toward young Indonesian readers.

6. Conclusions, Limitations and Proposals

We conclude that the study on how visuals of manga persuaded young Indonesians in imitating its visuals answers the proposed hypotheses partially. Manga visual and emotional attractiveness serve as the important factor for engaging Indonesian readers. Manga’s emotional contents play an important and crucial advantage in its immediate acceptance and vast influence among Indonesians, compare to other comics. Its ability to engage readers inside its universe by providing high level of immersion further advances its successful reception. Manga visuals also manage to trigger readers’ self-efficacy and outcome expectancy to make the visuals as their role-model in developing their drawing ability, which triggered positive attitude and behavior intentions to imitate its visuals. However, experiment result showed that behavior intentions in imitating visuals of manga had similar potency compare to visuals of non-manga.

While the experiment in measuring readers’ immersion produced quite comprehensive results, it still has several limitations, most notably in the form of visual stimuli. The chosen stimuli of both manga and non-manga (Naruto and Tintin) could not be generalized as the real representation for each respective category. Therefore we strongly recommend the utilization of more than one stimulus to represent each condition (manga and non-manga comic books) in future studies to produce more valid and reliable results.

This study also showed that the experiment for measuring stimuli’s perceived attractiveness produced more reliable outcomes since there were several previous studies used as references, most notably study by McCloud [15, 17], Konijn and Hoorn [23]; Jones [18]; Busselle and Bilandzic [24]; and Natsume [34]. Measuring behavior intentions in imitating visuals of manga proved to be more difficult because there were very few previous studies in the field of cognition, human behavior and media influence to use as references in experiment method.

Nonetheless, this study is exploratory in nature that focuses on real-world phenomenon. It tries to seek Indonesian young readers’ perception toward Japanese manga and how the perception affects their behavior in imitating manga visual from cognitive aspects. With this study’s conclusion, it is proposed that further studies could focus more on detailed issues of what kind of visuals of manga which could induce such strong emotional responses through the field of cognition.

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8. References


