

The exploration of students and teachers' view on ecological storybooks

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ABSTRACT

Environmental issues are on-going crises that have yet found sufficient solutions. Children, as the next generation, must be given the trust to be able to get in touch with environmental issues as form of children's empowerment and preservation act. This study aims to describe the views of elementary school students and teachers related to children's ecology-themed storybooks. This research is qualitative, the data collection uses a list and guided interview questions, observation sheets, questionnaire sheets, and expert validation sheets. The results of the study are as follows. First, there is a lack of ecological books in major bookstore in Yogyakarta, Indonesia. The existing children books containing environmental theme only included it as a supporting theme. This may result in most children participant to be not interested in such books. Second, teachers are mostly in agreement as to how children ecological storybook should appear ideally. This includes realism as the story's genre, explicit theme, forest settings, picture book form, human characters & nature vs human conflict, and happy closed ending for the story. All of these are believed to be able to educate children on the on-going environmental crisis and to encourage the children to face them.

Keywords: children's storybooks, ecology, children's empowerment, environment, children's literature

Eksplorasi pandangan siswa dan guru tentang buku cerita ekologi

Abstrak

Masalah lingkungan adalah krisis yang sedang berlangsung yang belum mendapatkan solusi yang memadai. Anak-anak, sebagai generasi penerus, harus diberi kepercayaan untuk dapat berhubungan dengan isu-isu lingkungan sebagai bentuk tindakan pemberdayaan anak dan pelestarian lingkungan. Penelitian ini bertujuan untuk mendeskripsikan pandangan siswa dan guru SD terkait buku cerita anak bertema ekologi. Penelitian ini bersifat kualitatif, pengumpulan data menggunakan daftar dan pertanyaan wawancara terbimbing, lembar observasi, lembar angket, dan lembar validasi ahli. Hasil penelitian adalah sebagai berikut. Pertama, kurangnya buku-buku ekologis di toko buku besar di Yogyakarta, Indonesia. Buku-buku anak bertema lingkungan yang ada hanya memasukkan lingkungan sebagai tema pendukung. Hal ini dapat mengakibatkan sebagian besar anak-anak peserta tidak tertarik dengan buku-buku tersebut. Kedua, guru sebagian besar sepakat tentang bagaimana buku cerita ekologis anak-anak harus muncul secara ideal. Ini termasuk realisme sebagai genre cerita, tema eksplisit, latar hutan, bentuk buku bergambar, karakter manusia dan alam vs konflik manusia, dan akhir tertutup yang bahagia untuk cerita. Semua ini diyakini mampu mendidik anak-anak tentang krisis lingkungan yang sedang berlangsung dan mendorong anak-anak untuk menghadapinya.

Kata kunci: buku cerita anak, ekologi, pemberdayaan anak, lingkungan, sastra anak

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INTRODUCTION

The world is facing a serious environmental problem, which until now any effective solution has not yet been found. If this problem cannot be dealt with, then it will create complex issues and put the life of humans and other living things in danger. Most experts believe a large part of environmental damage is due to human activities (Siswanto, Karimullah, Prasetyawati, & Nurhayati,

2019, 552). Humans are the main actors who violate the balance of the Earth by not only exploiting its natural sources but also by damaging human activities. As the main perpetrators of the environmental damage, it is humans themselves who have to deal with various kinds of natural disasters (Ahmad, 2010, 58). However, as a human is not the only species to inhabit Earth, other species which are innocent also have to deal with the result of the damage human-caused towards the environment. Many species of flora and fauna are on the brink of extinction, not to mention the many species already gone from our Earth as a result of overpopulation, overconsumption, and lack of conservation (Ceballos, Ehrlich, & Dirzo, 2017). At this rate, the diversity of animals and plants can only decrease if human does not change their behavior towards nature.

In Indonesia, various environmental problems are still seen as a big homework which requires fast and sustainable handling, including waste problem, flooding, global warming, damage of the marine ecosystem, a limited amount of clean water, forest damage, abrasion, river pollution, air pollution and soil pollution (Koran Sindo, 2018). Another problem that has to be faced by Indonesia is plastic pollution. Indonesia is among the 5 countries (besides China, Philippines, Thailand, and Vietnam) that have contributed the most to the pollution of the sea (Karim, 2018). All of these issues further devastate the receding natural balance of the ecosystems as these problems are interconnected in the way they have a causal relationship with one another.

From the above explanation, one can see how environmental damage causes disturbances to the continuity of human lives. It is crucial to promptly find the right and effective solutions to solve those problems. For if it is not taken care of immediately, those problems will keep piling up and surely the effect will be dreadful, especially for the next generation. The possible outcomes if human keep this pace in relation to how they treat environment include a more severe global warming, overpopulation, soil degradation, pollution, natural resources depletion, unsustainable waste, waste disposal crisis, deforestation, polar ice caps, loss of biodiversity (mass extinction), climate change, ocean acidification, unbalanced nitrogen cycle, ozone layer depletion, acid rain, water pollution, overfishing and overconsumption, urban sprawl, public health issues, and genetic engineering in which the result may be toxic to nature and wildlife (Rinkesh, 2020).

To find the best solution, children as the next generation of the nation have to be actively involved for they are the one to inherit and to inhabit the current Earth. Whether the situation will worsen or will get better, children will be the one to feel most of the effects of environmental changes. The research by Strife (2012) suggests that children feel anxious and negative towards the future of the environment. Thus, they have to be given the trust and knowledge to deal with real issues such as environmental problems as a form of children empowerment and therefore, give them hope to plan and change for a better future. For that reason, it is an urgent matter to choose the right means and methods to introduce these issues to children. Effendi and Nurjanah (2019, 412) stated, literature is believed to be a more effective media than psychology in the children growth process. Therefore, as explained by Djojuroto (2016, 153), many literary experts have tried to deal with the existing environmental problems by using the literary works which specifically talk about nature and the environment. These literary experts, known as ecocritics, are trying to critic and find solutions to various ecological issues.

Experts believe that children literature is a cultural byproduct which can be used as a medium to introduce many things to its readers. Children literature is full of ideologies, and these ideologies can consciously or subconsciously be internalized by the writer into the text s/he made (Hollindale, 1998: 98). Moreover, literature can be used as a facilitator to plant, fertilize, develop, and preserve valuable virtue values, not only for a certain member of society but also to wider society, and even to an entire country (Nurgiyantoro, 2019, 37). Literature's superiority is placed in how the strength of imagination can "explore the past, the present, and the future" (Dewi, 2016, 20). Thus, literature, in this case, children's literature, can be seen as a medium to make its readers aware of the environmental problems for one of the goals of ecocriticism is to make a connection between literature and the very real and existing nature, to not only treat nature as a thematic study but also something significant in relation to human lives (Estok, 2001, 200-38).

Although environmental damage is an issue relatively easy to be found in every corner of the Earth, including Indonesia, and the theme of environment preservation already gain more attention from many experts, however, the theme of nature and environment is not quite popular in the world

of children's literature. This theme is less popular than other themes such as friendship, adventure, etc. Furthermore, there are tendencies of conveying those themes explicitly, which is not in line with the opinion of Hollindale and Stephens (1992) who said that any theme would be more effective when it is delivered implicitly. Thus, not only there is a lack of children's literature regarding the environmental issue, but also the sufficiency of the existing ones.

Therefore, the focus of this research is on environmental issues and their relevance in Indonesian children's literary works. The researcher will describe the opinions of elementary school children and teachers on children's books with an ecology theme. The researcher hopes that the result of this research will open more opportunity for more writers to create more children's books which can foster and raise children's awareness on the importance in taking care of nature and environment. Thus, this research would like to find the answer to these particular questions: first, what kinds of children's books are available in the Indonesian market? Second, how do the elementary school students and teacher see the children's ecological-themed stories?

METHOD

This study uses a qualitative approach, and researchers act as the main research instrument as well as data collectors. The supporting instrument is the data collection sheet. The data source of this research is interview transcripts conducted on children and questionnaire answer sheets for teachers. While the data are of linguistic exposures in the form of expressions relating to the views of elementary school students and teachers about children's ecology-themed storybooks. There are 9 students involved in the study, ranging from the first to the sixth grade of elementary schools, while the 9 teachers involved also range from those of the first to the sixth grade of elementary schools in Yogyakarta.

Data collection technique used in this study is sampling, by (1) researchers collected and registered genre of children's stories on the market, (2) researchers read carefully the source of data in the form of interviews and questionnaire answers, (3) researchers identified, classified, and coded the data based on the problem, (4) the researchers interpreted preferences from the point of view of the child and teacher, who have been identified, and (5) collected the data collection sheet of the results of the documentation, and look for sources of reference. Data analysis techniques in this study were carried out through several stages, namely (1) data reduction, (2) data presentation, (3) conclusion drawing.

RESULTS AND DISCUSSION

Results

The availability of children's storybooks in the Indonesian market

In this section, the researcher presents the results of the research on the availability of children's storybooks in the Indonesian market, and the opinions of elementary school students and teachers on children's ecological-themed storybooks. The data was obtained from a survey conducted by the researchers in several large bookstores in Yogyakarta, Indonesia.

Table 1. Availability of children's storybooks in the Indonesian market

No.	Theme	Total
1.	Friendship	30
2.	Religion	36
3.	Biography of figures	6
4.	Daily life	45
5.	Love of nature and love of culture and custom	5
6.	Family	21
7	Adventure	17
8	Others	68

Based on the data in Table 1, it appears that the theme of love of nature does not become a stand-alone theme. The theme of loving nature is jointly expressed with themes related to culture and customs. This can result in a lack of in-depth discussion of environmental issues in the work.

Table 2. The views of elementary school students regarding children's stories

Respondent	1		2		3		4						5	
	Yes	No	Home	School	Alone	By others	a	B	c	D	e	f	Picture	Picture & Text
Student 1	√		√	√	√						√			√
Student 2	√		√	√	√					√				√
Student 3	√		√			√	√	√		√	√			√
Student 4	√		√	√	√				√	√			√	√
Student 5	√				√								√	√
Student 6	√		√	√	√			√		√			√	√
Student 7	√		√	√	√			√		√	√		√	√
Student 8	√		√	√	√			√		√	√		√	√
Student 9	√		√	√	√			√		√	√			√

Note.

The list of questions is as follows:

1. Do you like to read storybooks?
2. Where do you read the book?
3. Do you read books by yourself or there is someone else read them for you? (for example: parents/siblings/teachers)?
4. What kind of books do you like to read?
5. Which kind of book that you like the most, book with pictures or book that has both pictures and writings?

Column 4 deals with the theme of children's storybooks that the participants like.

- a. representing the theme of friendship
- b. representing religious themes
- c. representing the biographical theme of famous figures
- d. representing the theme of the character's daily story
- e. representing the theme of love of nature and culture
- f. representing a family theme

The data in Table 2 shows that the respondents of this research were elementary school students who love to read. Almost all of them read their own storybooks that they are interested in, except for one respondent who still needs an adult's help to read those books for him since he is not fluent in reading.

Regarding the theme of the chosen books, almost all respondents like the theme which deals with the character's daily life, and only one respondent did not give any answer. This respondent only gave the type of books he likes, namely picture books and picture storybooks that are added with narration. Only one respondent likes the religious theme. Another thing that appears in the table is that only one type of theme is not in the respondent's interest, which is the theme related to biographies of famous personalities.

While concerning the form of the book, all respondents prefer to read a picture book that is added with narration, so it does not only consist of pictures. Although some respondents claimed that they like both types of books, which are picture books (without any narration) and picture books accompanied by narration.

Seeing the results of the survey conducted, it can be concluded that there is a variety of theme that the respondents' like. Nevertheless, most of them choose the one which discusses the characters' daily life. While, regarding the form of the storybook, all respondents like stories which do not only consist of pictures but also with narration.

The preferences of children's ecological-themed book stories from the teachers' perspective.

This study tries to give a chance to teachers who are already accustomed to using literary texts as one of their teaching materials in the classroom. In this case, they are involved as the respondents who can provide additional insight to give a clear picture of what kind of storybook that can be used to teach children to increase their ecological awareness. There were 7 formal schoolteachers and 2

non-formal school teachers who quite often provided children's literature material in their classes to be involved in this survey.

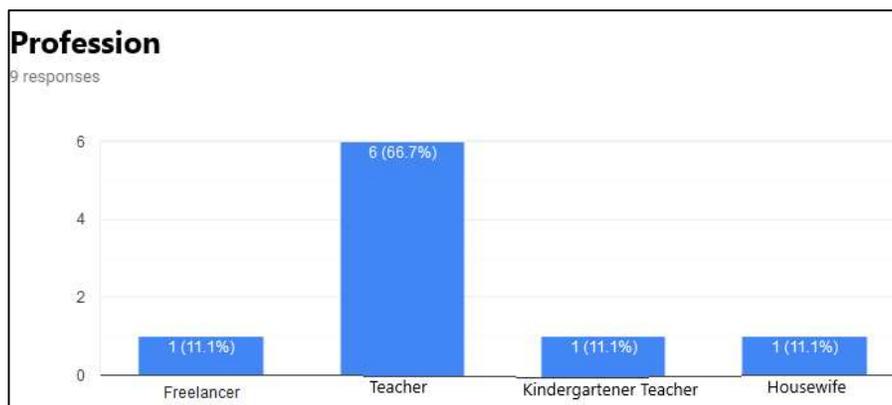


Diagram 1. Professional background of adults utilizing children literary texts

From the diagram above, it can be seen that the respondents are those who come from the formal and non-formal education sectors. Of the 9 respondents, 7 of them work as teachers with 1 working as a kindergartener teacher. Another one is a parenting group facilitator who has to teach youngsters in a certain village and the last one is a housewife, both considered as facilitators. The seven teachers often use literary texts in teaching and learning activities in their classrooms, and those two facilitators often used literary texts in delivering their parenting material. Based on their experience in using storybooks in teaching activities, they are expected to be able to provide an overview of what kind of storybooks can be taught effectively to children in conveying certain values they can learn. The following are some of the literary elements that are used as the keywords for the survey given to respondents.

Genre

Based on the pie chart presented below, it can be seen that realism is the genre that is considered as the most appropriate genre in conveying moral values to children's readers from the point of view of the majority of teachers who are respondents, with 55.6% of voters.

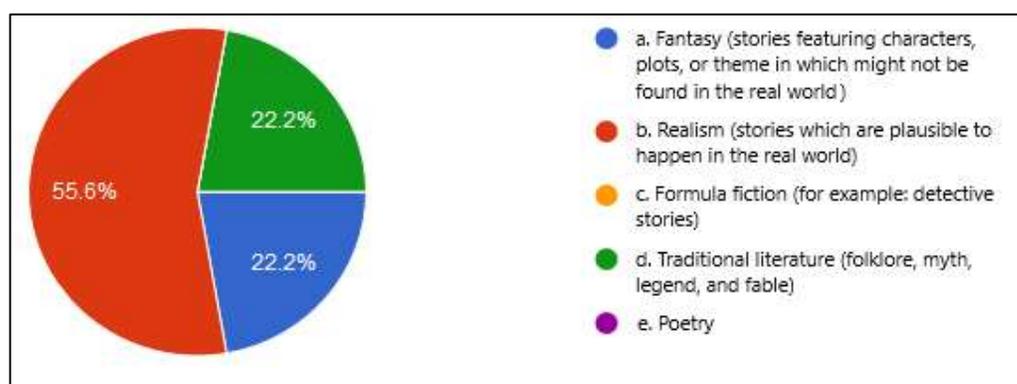


Diagram 2. Genre of the storybooks recommended by facilitators

Apart from realism, there were 2 other kinds of storybooks which are recommended by the teachers/facilitators, namely fantasy and traditional literature, which is chosen by 22.2% of the respondents for each genre. Realistic stories which tell narratives and scenarios that will likely occur in everyday life are thought to be more effective in delivering messages and providing case illustrations of certain problems to the children readers. Furthermore, detective stories and literary

works in the form of poetry are considered as unsuitable choices as texts given to children, in regard of developing their awareness to take care of the environment. In fact, detective stories emphasize more on how to make their readers curious and focus on criminal cases or mysteries that are usually the main storyline presented in these kinds of stories, while literary works in the form of poetry often lead to non-uniform perceptions between one reader to another, so this genre considered to be not easily interpreted by children.

Theme

Concerning the discussion of the theme, the teacher respondents believe that the theme should be conveyed explicitly rather than implicitly so that moral values presented in the storybook can be conveyed properly and received accordingly. As many as 55.6% of respondents chose to deliver themes explicitly.

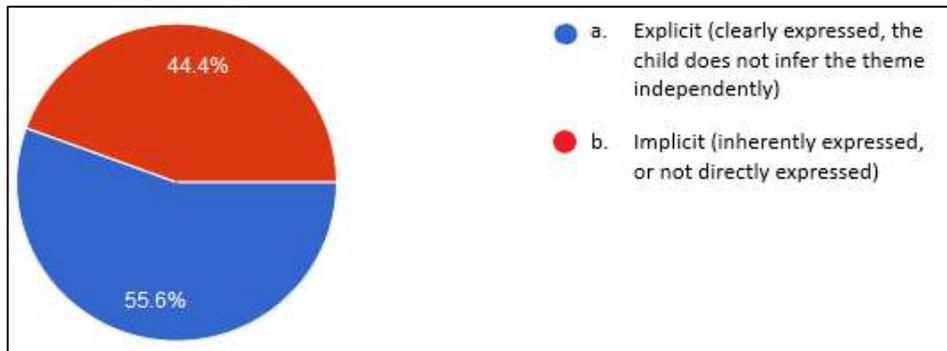


Diagram 3. Manner of conveyance of the theme

By clearly conveying the theme, children will have no difficulty digesting the message the writer wants to convey through the story being told. If they can fully understand the story presented, it will be easier for them to focus on the moral message that is conveyed. However, based on the chart, it can also be seen that the number of respondents who choose to convey the story message implicitly is almost equal, namely 44.4% of respondents. Conveying message implicitly may result in the message being more ingrained in a child's psyche and thus, more effective in altering or shaping a child's belief, moral, or behavior in tune with what is considered rightful by the story writer or the respondents.

The form of the storybooks

In terms of the presentation of the storybooks, teachers and facilitators argue that picture book will attract children's readers' attention more since it has illustrations that can stimulate the children's imagination. Moreover, those illustrations can support the delivery of the story narratives. The voters for this form of presentation are quite dominant, namely 77.8% of respondents. Graphic novels or comics and short stories share the same number of voters which is 11.1%.

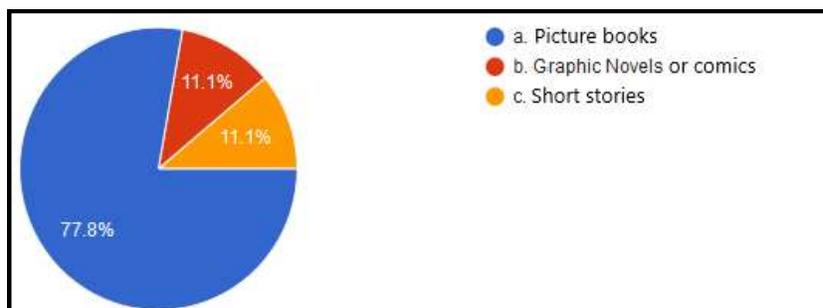


Diagram 4. Forms of story books deemed suitable for children

In accordance with stimulating richer imagination and creativity on children, the majority of respondents consider the form of picture book presentation to be more effective in delivering messages than the other form of presentations.

Setting of place

As one of the important tools in building a storyline, the setting is one of the elements that should be considered when creating a storybook. The majority of teacher respondents chose stories set in forests and rural areas or villages to give a more prominent impression of environmental concerns. As many as 66.7% and 55.6% of respondents chose the two settings considering that villages and forests are areas that have very strong natural elements so that they are considered suitable as the background settings for stories that present environmental problems.

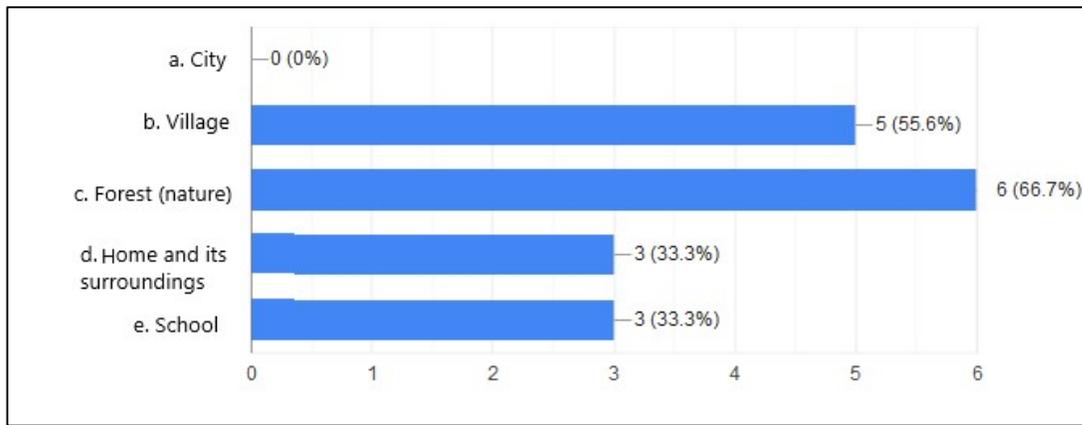


Diagram 5. Setting of place considered suitable to raise awareness of environmental concerns

Based on the graph (a. City, b. Village, c. Forest (nature), d. Home and its surrounding, e. School), it can also be seen that the background of home and its surroundings, as well as the school which is the children's daily environment, can also be used as choices, each with 33.3% of the number of voters.

Characters and conflict in the stories

According to the teachers, storybooks for children that emphasize the aspects of awareness of the importance of protecting the environment should use human as the main character, with a turnout of 55.6% of the total number of respondents.

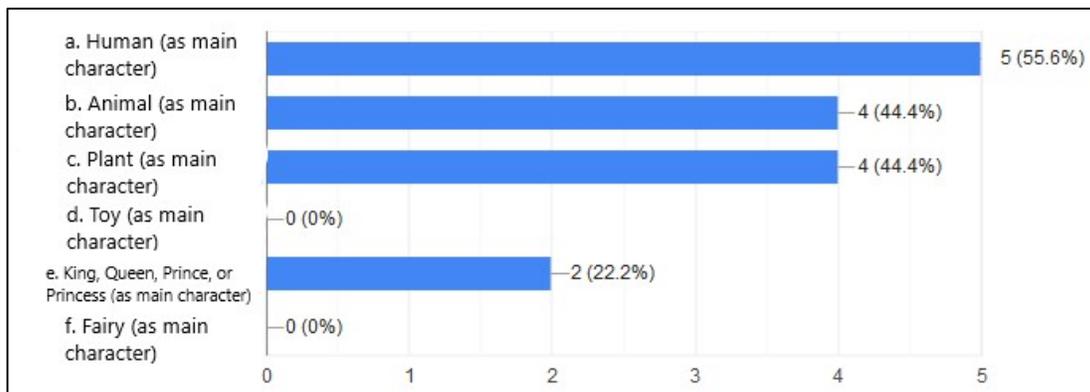


Diagram 6. Characters perceived to be suitable to be main characters in ecological story books

As for the fantasy genre, animal and plant are the next choices with 44.4% of the total number of respondents, and some respondents think that the figures of king and queen, princess and prince are also quite effective in attracting the attention of child readers. Meanwhile, fairy and toy characters are deemed unfit to be used in storybooks with ecological subjects.

Meanwhile, concerning the topic of the stories' conflict, as many as 66.7% of respondents thought that the conflict that occurred between nature vs human or anywhere in between was an important element in the storybook about awareness of protecting the environment.

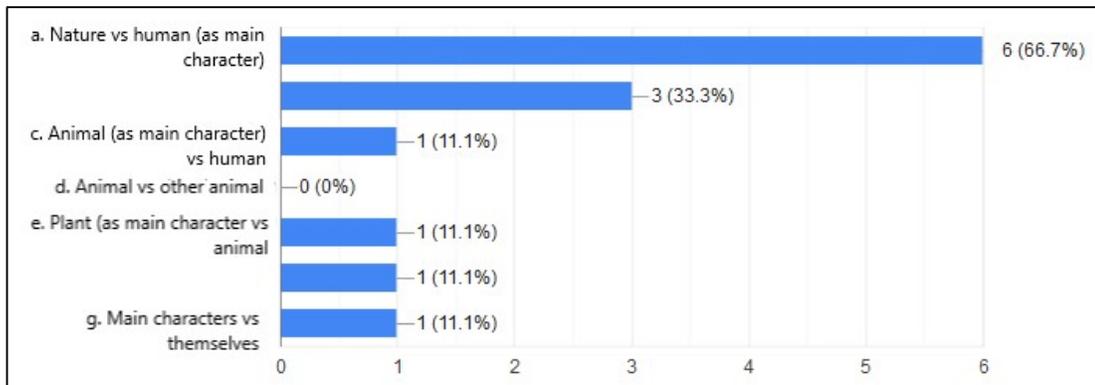


Diagram 7. Conflicts deemed suitable for raising awareness of protecting the environment

On the other hand, animal as main character vs human, conflicts between animals, plant vs animal, and conflict of the self are considered unsuitable conflicts to be presented in a storybook about environment.

Story Ending

From the following chart, it can be seen that 66.7% of respondents chose a happy ending as the closing part of the story that should be given in children's environmental storybooks. Endings like this can give children a sense of optimism to solve all environmental problems.

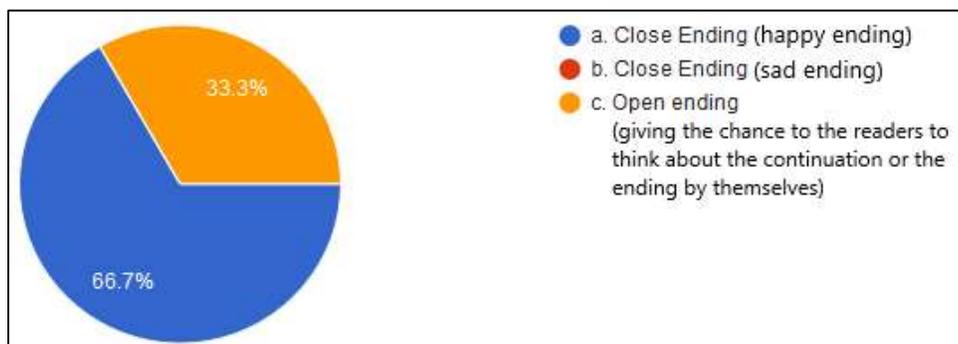


Diagram 8. Endings deemed suitable for ecological story books

However, as many as 33.3% of respondents think that *open ending* is also an interesting type of ending to be given to child readers so that they can stimulate the childrens' imagination and also their ability to think.

Discussion

Guler (2010) stated that the developmental age is crucial in nurturing value judgements and attitudes. Ideologies ingrained in childhood and teenage years can go a long way in shaping one's

world views. This remains true in regard to one's views and feelings toward nature. This is one of the reasons as to why children literature can play an important role in children's perspective of nature, their stance towards ecological problems, and the actions these children will take about them.

The availability of children's storybooks in the Indonesian market

According to Cairney (2010), there are several ways children literature can depict ecological theme. Some key themes in children storybooks concerning the environment are: 1. environment as the creation and the metaphysical experience of the world; 2. the relationship of people to the environment; 3. the negative impact of humanity on the environment; and 4. a celebration of the environment, its beauty and wonder. Those varied themes can teach children how integral is the environment not only as literature device but as something actually real and they should care about.

Therefore, research as to whether the current children literature on the market serves the above purpose is needed to be conducted, especially in a world where environmental problems become a prevailing and urgent issue. The burden is especially heavier on children because they are the one who will live longer to see the effects of human activities upon the world.

However, the research found that there is an ample lack of independent environmental-themed books in the several large-bookstores in Yogyakarta, where the research is conducted and centered on. Most of the books that contain nature-related issues are treating the theme as a secondary theme at best. It was employed together with other themes, which was found to be usually about loving culture and/or local customs. These three themes combined then can grow a feeling of "nationalism" or similar ideas supported by the books. Moreover, most of the children respondents chose "character's daily life" as their favorite theme to read.

The preferences of children's ecological-themed book stories from the teachers' perspective

Accordingly, when linked with the theme of ecology, children's storybooks are recommended to be written with a theme that addresses children's daily lives to be more relatable and digestible and that the story is not only in the form of pictures but also in the form of narrative (story) to develop their linguistic abilities alongside evoking their imagination. This way, any messages are supposed to be delivered more effectively. However, only choosing the theme and narrative form are not enough. In creating a hard-hitting story to bring more awareness, the target reader has to be considered. With that in mind, the teachers have a particular opinion as to how these can be achieved through the story's genre, theme, settings, form, characters & conflict, and story ending.

Firstly, most of the teacher respondents chose realism as a genre that is more digestible to children. This way, children can relate more to the story, and that it does not take much for them to picture the environmental problem as actual occurrences in the real world. This is also what makes almost half of the respondent chose an explicit form of theme delivery because it makes the message clearer, and for environmental problems are real-world issues that are urgent, a clear message help to convey the actuality of the problems and to encourage children to not only believe it but to act about it.

On the other hand, opinions regarding the settings and characters of children storybooks are rather diverse, with the slightly bigger choice to be the forest as setting and humans as the suitable characters, only 1 choice ahead of the village as the setting of place and animals and plants for characters. This is because most of these elements are more common in their interactions with the environment, and one of the most impacted if there were ever problems interfering with nature. This also corresponds with how nature vs human is the preferred conflicts to ecological books.

As to the preferred form of narrative, more teachers chose picture books. This might be because picture books are a very simple form of "show, don't tell" rules in writing, fiction or non-fiction. This form of story-telling can indulge the readers of a more realistic experience regarding the narrative. The readers can draw their own conclusion of the text and be actively involved in the unfolding stories, rather than passively get told what to do or feel by the text.

Lastly, the tone for story ending is favourably best if it carried a hopeful tone and a positive outlook towards environmental issues. It is hoped by giving a happy closed ending, children can feel more encouraged and optimistic in solving ecological problems.

CONCLUSIONS

This study explores the views of children and teachers concerning ecological storybooks and the availability of said books in major bookstores in Yogyakarta, where the study was conducted.

The study found that there is an insufficiency of environmental-themed books in the market and any ecological related issues are usually written to or in support of other themes. This is inadequate if the aim is to educate children on the ongoing battles human face against environmental catastrophe caused by human's own selfish and obtuse actions. Moreover, the children participants have voiced disinterest in the combined theme of environment, culture, and customs, and rather choose the storybooks about a character's daily life. Thus, enrichment of children storybooks diversity and more creative innovations of them is urgently needed, especially story books which deal with ecological issues.

On the other hand, educators have a rather clear view as to how the ideal children storybook should be. The story's genre needs to be realism, with the forest or any nature-like background as a setting of the place and act out by human characters in conflicting human vs nature issues. Also, the messages of the story need to be told explicitly and have to have a happy ending. All of these are in consideration of how to make children more aware and care about the pressuring environmental issues, yet for these children to still have hope and encouragement to solve the crisis.

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