

Analysis of Health Content Areas and Life Skills in Children's Storybooks

Rhodora F. Ereño

Life skills- based education is a critical element for quality education. It includes approaches such as incorporating literature and arts for holistic development. To maximize its impact on children's literature, it must be crafted and utilized based on the developmental level, needs, and interest of children. This research employs purposive survey and content analysis in its attempt to provide information on the health content areas and life skills reflected in local children's storybooks for Grades 3 and 4. It also determines the factors affecting the selection of children's storybooks for health education. Results of the study show that eight out of the nine health content areas and nine out of the eleven core life skills are substantially present in the coded local storybooks. Factors affecting the use of storybooks include interests and needs of target readers, appropriateness of health content and lesson, and literary quality. Literary elements such as relevant plot, appropriate illustrations, and interesting characters that aptly describe and emphasize health areas and life skills are also found in the storybooks. However, health content standards for Grades 3 and 4 are only slightly evident. This research can be used as guide for parents and teachers in appropriately selecting and using materials such as local storybooks for health education. Collaboration of health professionals, storybook writers, and publishers is also recommended to create more local storybooks relevant to particular levels, needs, and interests of children.

Keywords: *children's storybooks, content analysis, health content areas, health education, life skills*

Introduction

Life skills-based education is an inter-active process of teaching and learning which enables the learners to acquire knowledge and develop attitudes and skills for healthier lifestyle and quality life (WHO, 2004). The World Health Organization (WHO) also promotes the understanding of life-skills based education that must be utilized in particular content areas to effectively influence behaviors for holistic development. Life skills-based education has been recognized to develop, enhance, and reinforce the acquisition and practice of life skills critical to the holistic development of Filipino learners (Galvez-Tan et al., 2009). Efforts for an enabling and supportive environment for the enhancement of life skills have been done such that the core life skills are reflected in the performance standards that Filipino students should develop.

In the Philippine context, the life skills are divided into four categories such as personal, relationships, thinking, and work skills (Galvez-Tan et al., 2009; WHO, 2004). Personal skills include self-awareness, understanding one's emotions, and coping with stress. Relationship skills include effective communication, interpersonal skills, and empathy. Thinking skills include creative thinking, critical thinking, problem-solving, and decision-making. Work skills include productive and entrepreneurial skills. Specifically, the core life skills are described (DepEd, 2013 ; Galvez-Tan et al., 2009,) as follows:

1. Self-awareness skills include recognition and appreciation of basic worth and dignity as an individual along with character, strengths and weaknesses, desires, and dislikes.
2. Empathy is the ability to understand and accept others who may be different from oneself. It is the ability to understand and care about other peoples' needs, desires and feelings and to imagine what life is like for another person. It helps improve social interactions, especially, in situations of ethnic or cultural diversity. Empathy can also help to encourage nurturing behavior towards people in need of care and assistance, or tolerance.
3. Effective communication skills mean the ability to express oneself both verbally and non-verbally in ways that are appropriate to cultures and situations. This means being able to express opinions, desires, needs, and fears, as well as being able to ask for advice and help in a time of need.
4. Interpersonal relationship skills are the ability to relate with other people in positive ways and maintain good relations. This means being able to make and keep friendly relationships and good relations with family members, which are an important source of social support. It may also mean being able to end relationships constructively.
5. Decision-making skills refer to the ability to deal constructively with different decisions about life actions. They help people how to actively make decisions about their actions in relation to healthy assessment of different options and health consequences.
6. Problem-solving skills are the ability to deal constructively with different problems throughout life.
7. Critical thinking skills pertain to the ability to analyze information and experiences in an objective manner. They contribute to health by helping a person recognize and assess the factors that influence attitudes and behavior, such as values, peer pressure, and the media.
8. Creative thinking skills enable people to explore on alternatives and various consequences of actions which contribute to both decision-making and problem-solving. They are novel way of seeing or doing things by generating new ideas, shifting perspective, conceiving of something new, and building on other idea.
9. Self-management skills involve recognizing emotions within oneself and others, being aware of how emotions influence behavior, and being able to respond to emotions appropriately.

10. Stress-management skills include recognizing sources of stress and how they affect lives and taking actions in ways that help control one's levels of stress such as changing environment or lifestyle and learning how to relax.
11. Production skills are an addition to the core skills for Filipino children which refer to the ability to utilize and maximize internal and external resources toward generative productive endeavors responsive to people's needs.

The Kindergarten to Grade 12 Health Curriculum in the K to 12 Program emphasizes the development of health literacy competencies, positive health attitudes, and relevant skills in order to achieve a good quality of living and wellness. In particular, the Kindergarten to Grade 6 Health curriculum aims to develop students' understanding and observance of healthy habits and practices in achieving wellness. However, Health content areas are developed progressively across particular levels in terms of their relevance to the needs and interests of the Filipino learners (DepEd, 2013). Specific descriptions and importance of the Health content areas are as follows:

1. Community and Environmental Health situates the learner as an integral part of the community and the environment, with a responsibility to help protect the environment, supported by individual and community actions and legislation to promote a standard of health, hygiene, and safety in food and water supply, waste management, pollution control, noxious animal control, and delivery of primary health care.
2. Injury Prevention, Safety and First Aid studies the causes, effects, and prevention of accidents and injuries at home, in school and in the community, and in the performance of different activities, through promotion of safe home environments, safety programs, procedures, and services including first aid education.
3. Consumer Health involves application of consumer skills in the wise evaluation, selection, and use of health information, products, and services.
4. Family Health includes the study of human life cycle related to the personal interactions within the family that nurtures the individual and provides a home environment that enhances growth as a person and the development of ideals, values, and standards of behavior regarding sexuality and responsible parenthood.
5. Growth and Development involves study of developmental milestones in childhood and adolescence with emphasis on personal health and the development of self-management skills to cope with life changes.
6. Nutrition is the study of nutrients human needs, analysis of the equality and quantity of food intake, and development of proper eating habits to meet physiological and social needs. It also includes the study of diseases and disorders that arise from improper eating habits.
7. Personal Health focuses on the development and daily practice of health behaviors that promote physical, mental, social, emotional, and moral/spiritual health; and prevention and management of health problems.
8. Prevention and Control of Diseases and Disorders discusses the prevention and control of communicable and non-communicable diseases and disorders through the development of health habits, practice, and health programs supported by legislations and provision of health services in the school and in the community.
9. Substance Use and Abuse focuses on the prevention and control of the use and abuse of substances, their identification, causes, and effects on the person, family, society, and nation.

In Grade 3, the Health curriculum focuses on the development of understanding of and facilitating healthy practices on the health areas of

Nutrition, Prevention and Control of Diseases and Disorders, Consumer Health, and Community and Environmental Health. In Grade 4, the Health curriculum centers on the development of understanding on health areas of Nutrition, Prevention and Control of Diseases and Disorders, Substance Use and Abuse, and Injury Prevention, Safety and First Aid for the achievement of optimum health and well-being (DepEd, 2013).

In order to facilitate the development of health literacy competencies and life skills, the Department of Education (DepEd) highly encourages the teachers to use developmentally-appropriate teaching approaches. These include scaffolding on student experience and prior learning, utilizing culture-responsive scenarios and materials, incorporating arts and music in imparting health messages, engaging learners in meaningful games and cooperative learning activities, and using life skills and value-based strategies particularly in discussing sensitive topics such as substance abuse and sexuality. DepEd also promotes the use of learner-centered approaches and differentiated instruction in order to cater to the learners' various needs.

The use of children's literature as a teaching material across the curriculum has shown significant personal and academic value in the development and learning of children (Brown et al., 2011). Ubbes (2008) further stressed that children's storybooks are also used as tools for classroom intervention to enhance knowledge, change misconceptions, and modify behaviors. Storybooks can teach difficult concepts through personal experiences and style (Bosma & Guth, 1995) which enables children to empathize and formulate meaningful relationships, making it easier to learn information and adopt life skills integrated in a story. In general, Tan & Campbell (2014) and Ubbes (2008) acknowledged children's storybooks as excellent means to educate for health and life.

To realize the impacts of storybooks on learning, books shared with children should be represented by the best in both literary and artistic standards. Glazer (2000) suggested that books

must be evaluated by assessing the effectiveness of the literary elements of plot, setting, characterization, theme, and style of writing as well as how these elements are integrated to provide a unified whole. Brown, Tomlinson, and Short (2011) also said that because children have wide range of reading abilities and interests, balance among genre and variety of topics is essential. Ensuring the balance and quality of books helps maximize their impact on the teaching-learning process and towards the attainment of health goals.

However, studies show that health-related children's literature are underrepresented, oversimplified (Proctor, 2014; Turner, 2006), and inappropriate (Seipel et al., 2014) with varied medical inaccuracies (Tan & Campbell, 2014). In the Philippines, Barrozo (1998) stated that while there have been a growing number of Filipino published storybooks, the country's children's literature is still synonymous only to myths, folktales, and fables, traditions, cultural values, and moral lessons. Other genres such as realistic fiction with contemporary health issues are still overlooked (Almario, Bacsal & Hernandez, 2013; Romana-Cruz et al., 1996). Studies of Carlos (2003) and Quiwa (1998) also proved the presence of stereotypes and gender biases in the local collection of children's storybooks. While more storybooks are now readily available to parents, teachers, and children (Barrozo, 1998; Romana-Cruz, 1996), there is little account for the quality, accuracy, content coverage, and evaluation of all storybooks published and available in the country. The aforementioned situation prompted this research to take a closer look on the present crop of Filipino-published children's storybooks.

This research identified the health content areas and life skills reflected in local children's storybooks for Grades 3 and 4 and explored which of these are emphasized and overlooked. Such information is deemed essential to help provide appropriate and relevant health materials that vary across the different areas of health education. The research also determined the different factors affecting the selection and use of storybooks for health education and the literary elements that

reflect health areas and life skills. Specifically, this study sought to answer the following research questions:

1. What content areas of health education are present in the Filipino-published children's storybooks for Grades 3 and 4?
2. What life skills are present in the Filipino-published children's storybooks for Grades 3 and 4?
3. What factors affect the selection of children's storybooks for teaching elementary health education?
4. Which literary elements (setting, characters, plot, theme, style) are used to make the health content areas and life skills evident in the storybooks?

Methodology

The first phase of the study utilized purposive sampling which included 61 Health teachers, 98 parents, and 205 students from Grades 3 and 4 of 14 public elementary schools in District 4 of Quezon City. The questionnaires used for students and parents aimed to determine their familiarity on children's storybooks and the factors influencing their use. The student and parent respondents were randomly chosen based on their availability. On the other hand, questionnaires were given only to Grades 3 and 4 Health teachers of each school. The survey for teachers aimed to identify the commonly used local storybooks for teaching health education and the factors affecting their use. It also included a checklist of local storybooks published by Adarna Publishing House, Hiyas-OMF Literature Incorporated, and Vibal-Chikiting Books for children aged 9 to 11. The top 10% or 25 local storybooks identified as most familiar and used by the teacher-respondent were utilized for content analysis.

The second phase was the analysis of written or spoken record for the occurrence of specific categories of events, through the descriptive method of content analysis. Three coders were chosen for their expertise in the field of health education both in theory and practice. Coding

instruments for titles, coding rules, and categories were used for analysis. The rules and categories were explicitly stated to streamline and organize the coding process for consistency and coherence. A five-point ordinal rating scale was used for scoring, with five (5) for being most present (evident) and one (1) for not present at all (not evident). The quantitative conceptual coding involved counting the number of occurrences of the categories namely health content areas and standards, life skills, and literary elements reflected in the books based on the contextualized translation rules developed for this study. To establish coding reliability for content analysis with three coders, an inter-coder reliability test was conducted. The Spearman Correlation between each pair of coders was computed. In addition, the Friedman Test was used to determine if the level of scores are similar across the three coders wherein a p-value larger than 0.05 means that the scores of the three raters have no significant differences. Two books were taken for the inter-coder reliability test. Aside from the main pilot book (Book1), a second book (Book2) was chosen as a validation pilot book to verify if the observed agreements in Book 1 were replicated. Because of the positive statistical results where Book 2 confirmed the results for Book 1, it was concluded that the coders had considerable alignment in the way they rated the various dimensions of the books' contents.

Results and Discussion

Results of the study show that the health content areas, Personal Health (3.85) and Family Health (3.83) are the most evident in the coded set of storybooks. Out of the 25 coded storybooks, 18 titles have these health content areas to a great degree. Growth and Development (3.43) and Prevention and Control of Diseases and Disorders (2.64) are moderately evident in fourteen and eight books respectively. Slightly evident are Nutrition (2.36) in five books, Injury Prevention, Safety, and First Aid (2.32) in four books, Community and Environmental Health (2.31) in six books, and Consumer Health (2.04) in three books. The health content area that is not evident in storybooks is

Substance Use and Abuse with a mean score of 1.37 on only one book.

The results confirm that while there is a growing number of local storybooks, other genres and areas are overlooked and some areas in health are underrepresented (Romana-Cruz, 1996; Tan & Campbell, 2014).

The results coincide with the data gathered from the survey among students and parents which identified Personal Health and Family Health as one of the themes that children most want to read about and learn from storybooks. The survey among Health teachers also revealed a 14% usage and 16% availability of storybooks on Personal and Family Health. The high mean score of Personal Health implies that local publishers recognize the characteristics of 9-11 years old children as readers who enjoy books about self-worth stories and growing adventure exploring their needs, abilities, and independence (Brown, 2011; Glazer, 2000). As Personal Health focuses on the development and daily practices of health behaviors that promote physical, mental, social, emotional, and spiritual health, the data reflect the developmental consideration that children at this stage need more intervention and materials that would facilitate in the development of health habits and practices for prevention and management of health problems.

The high prevalence of storybooks on Family Health also reflects the strong value of family in Philippine culture. Filipino children and parents value storybooks with positive cultural values which include love for parents, neighbor, country, and the environment (Barrozo, 1998). As Kohlberg describes children at this stage who begin to value oneself, family, and group, it is good to note that authors and local publishers of storybooks consider these developmental characteristics of their target readers.

Although Growth and Development and Prevention and Control of Diseases and Disorders are moderately evident in the coded storybooks, results from the survey among Health teachers show that they are less available for teaching

health education for Grades 3 and 4. In particular, content standards for Prevention and Control of Diseases and Disorders such as prevention and control communicable diseases due to infectious agents, parasites, contaminated food and water and common communicable are slightly evident. The low mean scores imply that the coded storybooks reflect less lessons on Prevention and Control of Diseases and Disorders particularly, with respect to the content standards set by the K to 12 Health Curriculum for grades 3 and 4. Turner (2006) and Proctor (2014) also found out that most storybooks illustrate inaccurate and oversimplified presentation of illnesses. The low mean score of Prevention and Control of Diseases is also influenced by its clinical nature which needs more expertise to appropriately indigenize scientific principles and translate imaginative reconstruction of different processes in the human body in a language that children can understand (Tan & Campbell, 2014). While the storybooks are published earlier than the implementation of the K to 12 curriculums, the results pose a challenge for parents and teachers to creatively and appropriately modify their use of the currently available storybooks to best suit the needs of the students.

Furthermore, results of the content analysis also reveal that Nutrition is slightly evident in the coded storybooks. Relatively, the content standards in Grades 3 and 4 Health curriculum are also slightly evident in the coded storybooks. Found with mean average ranging from 1.24 to 1.96 are content standards on forms and prevention of malnutrition, food habit and customs, nutritional guidelines, reading food labels, healthy practices for food safety, self-management, and decision-making skills for healthy food choices and lifestyle. In contrast, survey results among teachers show that the area of Nutrition has the most available storybooks. Survey results from students and parents indicate that Nutrition is their most sought lesson from storybooks. However, despite its availability, teachers expressed less usage of storybooks on Nutrition for Grades 3 and 4 because of its inappropriateness for the said

levels and most storybooks on Nutrition are found more appropriate for younger levels.

Results of the content analysis reveal that the content standards for Injury Prevention, Safety, and First Aid are slightly evident in local storybooks. This is similar to the findings in the four titles of the twenty-five coded storybooks. Standards such as objectives and principles of first aid, first aid procedures for basic injuries, safety during disasters and emergency situations, and self-management for road and community safety have only mean scores ranging from 1.56 to 2.25. Likewise, teachers confirmed the very limited availability and usage of storybooks on safety education. The clinical and technical nature of the content area is seen as a critical factor influencing the production of storybooks for the said content area. It is crucial that children's storybooks on health education contain scientifically and medically accurate health information, be it fiction or non-fiction (Tan & Campbell, 2014), which make it more challenging for the storybook writers.

Other areas found slightly evident are Consumer Health and Community and Environmental Health along with their content standards. In particular, the content standards for consumer health namely wise consumer skills and consumer rights and responsibilities have mean scores of 1.77 and 1.75 respectively. Slightly evident standards on keeping home environment clean, peaceful and healthful, healthful ventilation and lighting, clean water, home garden, clean indoor air and recycling are also seen with mean scores of 1.31 to 2.47. The data confirm the survey results from teachers that Community and Environmental Health, and Consumer Health are rarely found in storybooks for Grades 3 and 4. It should be noted that while more storybooks present self-worth stories and daily life-familiar experiences, other health areas on responsibilities in the community and environment are geared toward older students with longer lengths and higher reading levels, advanced vocabulary, complex sentence structure and deepened social involvement (Seipel et al., 2014).

Not evident in the coded storybooks is the health area of Substance Use and Abuse. The results concur with the responses of the teachers which consistently ranked storybooks on Substance Use and Abuse being least available. The survey among students and parents also listed it down as the least topic children want to learn from storybooks. Furthermore, the mean scores for the content standard on Substance Use and Abuse also indicate that it is not evident at all. Specifically, the content standards on medicine use and abuse are slightly evident at 1.58 mean score while standards on uses and types of medicines and skills on proper use of medicines are both not evident at 1.00 mean scores. Such disparity can be explained by the coverage of the old Health curriculum where substance use and abuse were only integrated in the higher grade levels with more comprehensive materials other than storybooks.

On the other hand, nine out of eleven life skills are most evident in the coded local storybooks. They are namely empathy (4.37), self-awareness (4.36), critical thinking (4.19), creative thinking (4.12), decision-making (3.88), interpersonal relationship (3.76), effective communication (3.72), problem-solving (3.72), and managing emotions (3.61). Moderately evident life skills in the storybooks include Managing Stress with a mean score of 2.81. Productivity (1.51) is almost not evident at all.

Empathy is found most emphasized in the coded storybooks which adheres to Brown et al., (2011) who explained that as 7 to 9-year-old children begin to assert their growing abilities to meet their own needs, they also begin to understand others' perspectives. Mitchell (2003) identified storybooks that deal with emotions making children understand themselves. The emphasis on empathy is also consistent with Galinsky's model (2010) which includes perspective taking as one of the seven essential life skills for children. From the cultural aspect, this result can also be explained with the positive value of Filipinos who can easily relate with other people and adapt to different situations.

Self-awareness is highly emphasized as Erikson's psychosocial development theory suggests that children become aware about themselves and start to believe their abilities. Galinsky (2010) stressed that children should develop self-awareness particularly on focus and self-control, critical thinking, communication using books as platform for conversations, and taking on challenges. Critical thinking is also one of the most emphasized life skills in local storybooks which shows that writers consider the growing abilities of aged 7-11 that can understand more advanced information and different perspectives (Brown, 2011; Mitchell, 2003). It is good to note that social, emotional and thinking skills were found most evident in the storybooks.

Moderately evident life skills in the storybooks include managing stress with a mean score of 2.81 while the slightly evident is productivity skills with a mean score of 1.51. The data show the misconception that stress and productivity are for higher age group only, hence the use of storybooks needs to be modified. The results also adhere to Almario & Bacsal (2013) who found that the narrative themes among local storybooks include only the following: socio-cultural values including contemporary morality and ethics, self-discovery and empowerment, family relationships, moral dilemma, dealing with death and loss, peer relationships, and school-related issues. Less emphasis is given to managing stress and productivity.

Survey results from this study also reveal that the factors that influence the selection of storybooks for health education are appropriateness to the interests and needs of its target level, accuracy of health content and lessons found, and excellent literary quality such as interesting characters, relevant plot, and creative illustrations. Other factors include availability and accessibility of materials, influence of parents and teachers, and competence and trainings on storybooks. Minimal factors include time allotment for health education, affordability, and prominent authors.

Survey results from students reveal that the most influential factor leading children to read storybooks is their own interest to storybooks (46%) and that the dominant factor which students consider in choosing storybooks is the good moral lesson of the story (38%). The results illustrate the findings of Douglas & Clark (2011) that most children agree that reading is important with its moral lessons. This preference generally reflects Piaget's theory which states that concrete operational ability of children at this age can process information on their own and begin to assert their growing abilities; hence materials and practices must suit to their needs and interests (Brown, 2011). Likewise, the study of Barrozo (1998) stated that Filipino children value storybooks with positive cultural values. Other factor, which includes good story that is meant for children (15%), illustrates the general characteristics of children who enjoy stories about children of their age or slightly older with relevant adventures (Brown, 2011). The factor of readability such that the story is easy to read and understand (13%) displays Erikson's fourth stage of industry vs. inferiority wherein children begin to have the determination to achieve success such that storybooks that are easy to read and understand give them a sense of achievement and enjoyment in reading.

Survey results from the parents are similar to the responses of the students. Thirty-three percent (33%) of the parents have the awareness on the importance of storybooks for children which influences most their support to the reading of their children. Parents select based on the interest of their children and good moral lesson of the story with the highest percentage at 29%. This insight of parents is also found in the 2012 National Book Development Board (NBDB) survey which revealed that most Filipino adults agree that books are important with the information and knowledge acquired, not only for school and work but also for everyday activities and learning. Twenty-six percent (26%) of parents also expressed their support and encouragement for their children to read. The data confirm the findings of Barrozo (1998) that parents

regard storybooks excellent because of the positive values contained in them.

Furthermore, teachers also equally consider appropriateness of content to the grade level as the most important in selecting storybooks for health education. The factor adheres to the developmentally-age- appropriate consideration that must serve as foundation in translating materials such as storybooks for teaching and learning (Telljoham, 2006).

Consideration of teachers with their competence and interest in story books is implicated by the high percentage of the factor of educational trainings and personal preference on storybooks. The data also reflect that attitude and interest of adults towards reading influence their promotion of reading to children (McKool, 2007).

Furthermore, this study also found out that the literary elements in the coded storybooks from Adarna Publishing House, Hiyas-OMF Literature Incorporated, and Vibal- Chikiting Books have very relevant plot, appropriate illustrations, and interesting characters that greatly describe and emphasize health areas and life skills.

Particularly present to a great degree are relevant plot (3.53), characters (3.52), and appropriate illustration (3.51). This means that the plots of the local storybooks are within the experience of and interesting to children. This finding concurs with earlier results of content analysis where empathy skills are most evident which make the young readers relate well with the story. The characters are clearly identified and described in the text and illustrations which make children to easily relate with them and make the book memorable (Glazer, 2000). Personality and actions of the characters strongly emphasize health concepts and life skills.

The high mean scores on illustration also reveal that most readers could describe the characters accurately because of the books' appropriate illustrations that strongly relate to the text. The attractive illustration and graphics also moderately

represent the health areas and life skills with 3.31 mean score. Vibrant illustrations and unique titles convey the claim of Gayman (2008) that aesthetic use of colors, drawings, and art devices create a wholesome, unique, and compelling appeal to storybooks. Indeed, rich and creative combination of text and illustrations makes storybooks appealing and engaging for children (Proctor, 2014) making them potent tool in impacting health literacy.

Meanwhile, the mean scores on the accuracy of health content (3.45) and health content free from biases and stereotypes (3.21) are moderately evident in the coded storybooks. The data imply that some inaccurate concepts, stereotypes, and biases are present in the storybooks. These results adhere to the findings of Quiwa (1998) and Carlos (2003) who found the presence of stereotypes and gender bias in the local storybooks. With the pervasiveness of messages in children's literature, Quiwa and Carlos recommended for a more balanced gender representation of characters and portrayal of activities for both genders. These concerns on accuracy and biases were also identified by teachers as crucial factors that influence their selection and use of storybooks. The results then imply that there should be more attention and collaboration among story writers and health educators to produce more appropriate and accurate storybooks for health.

The 3.36 mean score of logical flow of the plot and the setting describes storybooks with logical and interesting plot that moderately emphasize health concepts and life skills. There are also some vivid descriptive words used to tell when and where the story takes place which also moderately describe health areas and life skills. The language used in storybooks can be moderately understood and read by children with its 3.32 mean score. Moreover, 3.29 mean score of the style of writing and language used is moderately effective in presenting health concepts and life skills. There are picture books that look like children's books but contain language or concepts that are at a higher level, intended for an older reader (Tan & Campbell, 2014). Thus, the readability of text and

correlation of illustration with the text must be carefully matched with the level of the target audience

Minimal factors influencing selection and use of storybooks but still cannot be ignored are availability and affordability. On the other hand, author matters least to children as long as they like and can relate with the stories. Almario & Bacsal (2013) even noted that award-winning books with prominent authors are not as popular to children as they are to the critics. Time allotment for health class with 40 minutes for elementary health education in the K-12 curriculum (9%), compliance to the school's policy/philosophy (4%) and financial budget for the books (4%) are also considered as minimal factors.

Conclusions

In conclusion, eight out the nine health content areas are evident in the local coded storybooks for Grades 3 and 4 health education with Personal Health and Family Health as the most evident. Growth and Development, and Prevention and Control of Diseases and Disorders as moderately evident; and Nutrition, Injury Prevention, First Aid and Safety, Consumer Health, and Community and Environmental Health as slightly evident. Substance Use and Abuse is found not evident. Also, more than one health content area is reflected per book.

Majority of the life skills are also evident in the coded storybooks. Twenty-one out of 25 titles have more than six life skills. Empathy, self-awareness, critical thinking, creative thinking, decision-making, interpersonal relationship, effective communication, problem-solving, and managing emotions are found most evident. Managing stress is moderately evident while productivity is not evident in the samples.

However, most of the content standards and life-skills of health education curriculum for Grades 3 and 4 are slightly evident, in particular in the areas of Prevention and Control of Diseases and Disorders, Nutrition, Injury Prevention, First Aid, and Safety, Consumer Health, Community and

Environmental Health. Content standards for Substance Use and Abuse are not evident at all.

Foremost factors that influence the selection and use of storybooks for health education include interest and needs of children, appropriateness to the target level, accuracy of health content and lesson, and excellent literary quality. Other factors include availability and accessibility of materials, influence of parents and teachers, and competence and educational trainings on storybooks. Minimal factors include time allotment for health education, affordability, and prominent authors.

Literary elements such as relevant plot, appropriate illustrations, and interesting characters that greatly describe and emphasize health areas and life skills are also found in the storybooks.

In light of the findings and conclusions, this study recommends health information from this research be considered as guide for parents and teachers in selecting and using appropriate materials for children as well as for storybook writers and publishers in creating more local storybooks relevant for particular levels, needs and interest of children.

Storybooks must be enriched with more accurate health concepts to emphasize more life-skills that are relevant across specific health content areas in specific levels. For health education in Grades 3 and 4, storybooks that illustrate content standards of Nutrition, Prevention and Control of Disorders and Diseases, Consumer Health, Injury Prevention, Safety and First Aid, Community and Environmental Health, and Substance Use and Abuse must be considered. Collaboration between children's storybook writers and health professionals is recommended to create more appropriate and relevant storybooks for health education. Teachers, parents, and students are encouraged to explore more available local storybooks. Enhanced awareness on available materials will help them in selection and use of storybooks for health education. Teachers must also employ creative strategies in adapting and modifying the present crop of local storybooks to a

more appropriate level on the interest, skills, and needs of students.

Factors in selecting storybooks identified by this study may be considered to provide more appropriate literature for health education. Professional development for teachers must also be provided to simultaneously maximize the positive influence of children's literature as a creative and effective teaching tool that can scaffold implementation of the DepEd K-12 Health education curriculum.

References

- Almario, V., Bacsal, M., & Hernandez, J., (2013). *A Filipino children's storybooks. In Beyond Folktales, Legends and Myths: A Rediscovery of Children's Literature in Asia*. Singapore: Tusitala RLSPTe Ltd.
- Barrozo, O.N. (1998). *A content analysis of storybooks published by Adarna, Cacho and Walt Disney for children 1-10 years old and survey among parents, teachers and grade school pupils on their storybook preferences, values found in present storybooks and values that they consider important* (Unpublished master's thesis). College of Mass Communication, University of the Philippines, Diliman Quezon City.
- Bosma, B., & Guth, N., (1995). *Children's literature in an integrated curriculum. The authentic voice*. New York USA: Teachers College Press, Columbia University.
- Brown, C. L., Tomlinson, C. M., & Short, K. G. (2011). *Essentials of children's literature*. Boston USA: Pearson Education Inc.
- Carlos, P.H. (2003). *Gender stereotyping in contemporary Filipino children's storybooks* (Undergraduate thesis). Institute of Library Science, University of the Philippines, Diliman Quezon City.
- DepEd (2013). *K to 12 health curriculum*. Retrieved from www.deped.gov.ph/sites/.../Final%20Health%201-10%2001.09.2014.pdf <https://www.scribd.com/document/93080680/HEALTH-K-to-12-Curriculum-Guide>
- Douglas, J. and Clark C. (2011). *Young people's reading and writing: An in-depth study focusing on enjoyment, behavior, attitudes and attainment*. Retrieved from <http://files.eric.ed.gov/fulltext/ED521656.pdf>
- Formento, R.L., (2015). *Analysis of health content areas and life skills in children's storybooks* (Unpublished master's thesis). College of Education, University of the Philippines, Diliman, Quezon City.
- Galinsky, E. (2010). *Mind in the making: The seven essential life skills every child needs*. USA: Harper Studio.
- Galvez-Tan, J.Z., Vicencio, E.M., Baquiran, R.S., Dionisio, A.R., Parawan, A.R., Sumayo, G.R., & See, C.A., (2009). *The Health curriculum in the Philippine basic education: A resource book on health for teachers (Vol.2)*. Pasay City: UNACOM Social and Human Sciences Committee.
- Gayman, H.B. (2008). *Evaluating children's storybooks: A content analysis of collection in the children's library and aklatang pambata* (Undergraduate thesis). Institute of Library Science, University of the Philippines, Diliman Quezon City.
- Glazer, Joan I. (2000). *Literature for young children (4th ed.)*. Ohio: Prentice Hall
- Mckool, S.S. (2007). Factors that influence the decision to read. *Reading Improvement 44 (3)*. Retrieved from <http://www.freepatentonline.com/article/ReadingImprovement/170278589.html>
- Mitchell, D. (2003). *Children's literature: An invitation to the world*. USA: Pearson Education Inc.
- Proctor, M. (November 2014). *The chronically ill child: A content analysis assessing the realistic portrayal of the "illness experience" for child characters in 21st century children's picture books (Master's paper)*. Retrieved from <https://cdr.lib.unc.edu/indexablecontent/uuid:c0fe05ca-6fd0-4fe6-99c5-1b6fe65af31a>
- Quiwa, M. (1998). *content analysis of gender representations in children's picture books in the Philippines* (Unpublished master's thesis). Institute of Library Science, University of the Philippines, Diliman Quezon City.
- Romana-Cruz, N., et al., (1996). *Bumasa at lumaya: A sourcebook on children's literature in the Philippines*. Pasig City: Anvil Publishing Inc.
- Seipel, B., Carlson, S. E., Bianco-Simeral, S., Frigaard, M., Wolf, C., & Goto, K. (December 2014). The nutritional moral of the story: An examination of storybooks used to promote healthy food-choice behaviour. *Psychology and Education – An Interdisciplinary Journal*, 30-41. Retrieved from <http://www.csuchico.edu/soe/documents/SEIPEL,%20Carlson,%20Bianco-Simeral,%20Frigaard,%20Wolff,%20%20Goto%20In%20Press.%20The%20Nutritional%20Moral%20of%20the%20Story.pdf> <http://uaps2007.princeton.edu/papers/70757>
- Tan, M.C. and Campbell, S. (2014). *Selecting fiction books for a children's health collection. Deakin Review of Children's*

- Literature*, 4(2). Retrieved from <http://ejournals.library.ualberta.ca/index.php/deakinreview>
- Telljoham, S.K. et al. (2006). *Health education: Elementary and middle school applications (5th ed.)*. New York USA: McGraw Hill.
- Turner, J. C (2006). *Representations of illness, injury, and health in children's picture books [Abstract]*. *Children's Health Care*, 35(2), 179-189. doi:10.1207/s15326888chc3502_5-0.95 Impact Factor
- Ubber, Valerie A. (2008). *Educating for health: An inquiry-based approach to prek-8 pedagogy*. Miami USA: Human Kinetics
- WHO. (2004). *Skills for health: Skills-based health education including life skills. The WHO Information Series on School Health*. Retrieved from <http://hhd.org/resources/publications/who-informationseries-school-health-skills-based-health-education-and-life-s>

About the Author

Rhodora Formento Ereño is a teacher by profession. She holds a Master's degree in Health Education and Bachelor's degree in Elementary Education major in Science and Health from University of the Philippines Diliman. She has also served as a consultant and author in the development of elementary health curriculum and materials for the DepEd K to 12 program. Her love for children's storybooks flourished during her first few years in teaching pre-nursery at UP-PAUW Child Care Center. Presently, she is an Assistant Professor at the UP Integrated School under the Health and PE Department.

Correspondence concerning this article should be addressed to Rhodora Formento Ereño at dorie4men2@yahoo.com