Conceptual Framework for Health Literacy Instruction in Malaysian International School Libraries

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Abstract
The study is anticipated to assist school libraries in creating and managing an effective programme to promote health literacy throughout the community. School libraries can better promote health literacy and healthy living by participating in these programmes. The research will adopt a mixed-methods strategy, combining qualitative and quantitative techniques. Expanding school library services to incorporate health literacy promotes their vitality and well-being. Furthermore, by integrating significant works of literature, a framework may be developed to guide the research and act as a reference for a library for developing health-related activities or programmes.

Keywords: Health programme; health literacy; school libraries; social wellbeing

1.0 Introduction
Schools contribute significantly to the well-being of students, families, and communities worldwide. World Health Organization (WHO), United Nations Educational, Scientific, and Cultural Organization (UNESCO), and United Nations International Children's Emergency Fund (UNICEF) introduced the concept of health-promoting schools for the first time in 1995. However, only a few nations have effectively adopted health education broadly, and even fewer have made the necessary institutional changes to make health education an integral and long-term component of the educational system. It is predicted that the study will assist school libraries to plan and implementing a community-wide health literacy program. These activities can help school libraries reach out to their user groups, promoting awareness and interest in healthy living, offering access to high-quality health information, and ultimately enhancing citizen health literacy. Schools are places where students acquire the knowledge, attitudes, and skills necessary to succeed in their future education and careers and maintain their health and wellbeing. The World Health Organization (WHO) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) began a cooperative initiative in 2018 to establish and promote global standards and indicators for Health Promoting Schools (HPS) and their implementation. More than 1.9 billion school-aged children and adolescents are expected to benefit from this initiative, contributing to WHO's 13th General Programme of Work's aim of "making one billion lives healthier" by 2023. The programme will also help reach the United Nations Sustainable Development Goals for education and health, including the 2030 goal that "all learners acquire the knowledge and skills needed to promote sustainable development, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship, and respect for cultural diversity."

Consequently, this research aims to propose a conceptual framework for assessing the component of school-based health-related programmes and to establish the framework components for international school libraries health literacy programmes. This research is...
essential for supporting the Malaysia Education Blueprint 2013-2025 and UNESCO’s Sustainable Development Goals for 2030, which seek to provide everyone with quality education and a decent standard of living, leaving no one behind. This is also compatible with the theme of the Malaysia Librarian 2022 conference, which is that no one will be left behind and the library is a catalyst for change.

The research is expected to benefit school libraries in developing and implementing a community-wide health literacy campaign. These activities can aid school libraries in reaching out to their user groups, raising awareness and interest in healthy living, offering access to high-quality health information, and, ultimately, improving citizen health literacy. Combining qualitative and quantitative methods, the research will adopt a mixed-methods approach. The quantitative approach will collect data from library users to identify the required and anticipated health-related programmes and activities that school libraries will host. The profitability and health of Malaysian school libraries can be ensured by broadening and diversifying their duties and responsibilities to include health literacy efforts. This will increase the value and significance of libraries in Malaysia’s consciousness and perception. As part of the qualitative methodology, interviews and focus groups will be used to collect data from practical school librarians and public health program-specialising medical practitioners. The quantitative methodology will collect data from library users to determine the required and anticipated health-related programmes and activities that school libraries will host. The profitability and health of Malaysian school libraries can be ensured by broadening and diversifying their duties and responsibilities to include health literacy efforts. This will increase the public’s knowledge and awareness of the significance and importance of libraries in Malaysia.

2.0 Problem Statement
Malaysia is not resistant to the present global financial crisis, which has been aggravated by the COVID-19 outbreak and other social and political difficulties. Combating the COVID-19 pandemic, as well as other public infectious diseases, is the responsibility of every person. Unfortunately, many Malaysians fail to take responsibility for their health difficulties. Malaysians still have a poor degree of health literacy. Health literacy is a person’s capacity to collect, process, and interpret essential health information and services to make educated health decisions (Institute of Medicine, 2014). Several Malaysian public libraries made modest steps to implement health-related initiatives. However, the efforts were typically restricted and shallow. The community demands more comprehensive and engaging health literacy events. Libraries establish health-related projects to engage their users to promote a healthy lifestyle, expand access to high-quality health information, and ultimately improve citizens’ health literacy (Luo, 2018). The School Resource Centre’s role in the early phases of student instruction begins here. To promote healthy life habits and raise awareness about them. To stay relevant, school libraries must respond to this situational need and create initiatives to help the community’s health literacy level rise.

The following are the objectives of this research project:
1. To identify the component of the framework for students health-related programmes and activities for school libraries
2. To discover strategies for the implementation of successful and impactful health-related programmes and activities for students in school libraries

3.0 Methodology
The study will utilise a mixed-methods methodology, incorporating both qualitative and quantitative approaches for the purpose of data collection and analysis. The qualitative technique for data collection from school librarians, medical professionals, and practicing school teachers primarily focused on health programmes will involve the use of interviews and focus groups. The study will employ a quantitative methodology to gather data from students in order to ascertain the requisite and projected health-related programmes and activities organised by school libraries. The methodology employed in this study encompasses a collection of philosophical assumptions that provide guidance for the collection and analysis of data from diverse sources. In essence, it blends qualitative and quantitative research approaches in order to acquire a thorough grasp of the research issue. The mixed-methods approach is characterized by its unique approach to research design and its ability to integrate different types of data in a meaningful way.

This study will employ two distinct forms of analysis, namely descriptive and inferential. Before conducting any further analysis, it is necessary to assess the potential presence of common method variance. This will be accomplished by employing Harman's single factor test, a widely used method for this purpose. The demographic data will undergo frequency analysis, while descriptive analysis will be conducted on all variables included in the research model. This descriptive analysis will involve calculating the mean, standard deviation, and standard error. Furthermore, this study will employ various inferential analyses, specifically the independent sample t-test and ANOVA, to examine differences between groups. The analyses will be conducted using SPSS Version 24.0. Given the theoretical framework that is employed to investigate the interrelationships, this study will also utilise Partial Least Squares (PLS-SEM) Structural Equation Modelling analysis. The measurement model and structural model will be evaluated in a systematic manner. The statistical analysis results will be interpreted in a manner that justifies the acceptance or rejection of the hypotheses. The discussion will be conducted in an objective manner by comparing the obtained results with those of previous studies. Furthermore, this paper will develop a set of recommendation strategies aimed at facilitating the successful implementation of health literacy initiatives within Malaysian school libraries.

3.1 The Expected Outcome and Its Implications
It is anticipated that the study would assist school libraries in formulating and developing successful health-related programmes and activities that influence the community. School libraries can reach out to their user communities by implementing these programmes
and activities, which raise awareness and interest in leading a healthy lifestyle, promotes access to high-quality health information, and ultimately improves health literacy among the general population.

3.2 Significance Outcome
The reinterpretation and diversification of the tasks and responsibilities of school libraries in order to embrace health-related programmes and activities can ensure the libraries' continued viability and well-being. This is an essential step toward achieving sustainability. In addition, this would further raise the recognition and perception of the Malaysian public on the importance and significance of the libraries' existence, which will increase the recognition and perception of the existence of the libraries.

4.0 Literature Review

4.1 Health-based Programme in School
Adolescence is a developmental stage marked by an increased susceptibility to mental health issues, including depression and anxiety, and connected issues like loneliness (Costello et al., 2005; Kessler et al., 2005; Reneflot et al., 2018). Young people in Norway between the ages of 15 and 16 exhibit significant levels of depression and anxiety symptoms in 11% of boys and 29% of girls, and severe loneliness in 8% of boys and 16% of girls (Bakken, 2020). These conditions may interfere with a teen's ability to operate normally, their quality of life, and their desire to learn. Recognizing the value of "excellent mental health" has encouraged the development of a variety of youth-focused interventions both in Norway and globally. Students must get training to provide them the necessary health informatics competences and abilities as the health business grows more dependent on cutting-edge technology, particularly information systems. The importance of educating students in health informatics cannot be overstated in order to raise the bar for the healthcare industry and, therefore, patient outcomes.

4.2 Library Therapeutic Landscape
When describing the relationship between place and improvements in a person's mental health, it is usual practice to use the library metaphor as a therapeutic landscape. In other words, a library is a place people can go to enhance their mental health. The study by Brewster (2014) showed how the library's services and resources were used to help a specific user with problems. There is always more to learn about this subject, especially in Malaysia, where research on it is ongoing. Husaini, Noordin and Shuhidan (2018, 2019, 2021) conducted the research. They further support the idea by putting a model of the Public Library Therapeutic Landscape Quality and Satisfaction with Regard to the Public Libraries into practice. As a direct result of this, further domains have been established in order to further classify the component parts. The effectiveness of the therapeutic environment in the school library, which can also lead to the overall wellness of the students, can be evaluated with the help of this model. The findings may be useful to the administration of both the school and the library in their efforts to implement the respective information, education, and training connected to healing concerns.

4.3 Library as the Main References of Health-Related Information
There is much incorrect information about it, which adds to the community's anxieties. As a result, attempts to prevent the illness from spreading further are difficult to implement because critical information does not reach the community (Wang & Lund, 2020). Everything, including medical practises and the general public, requires health-related information. The role of libraries, should be highlighted in developing programmes and activities to provide valuable and reliable health information. It will help the public improve health literacy by providing efficient and effective access to high-quality and understandable health information. Libraries are trusted community locations offering various services and advantages, including supported digital access, health information resources and services, and volunteer and recreational activities. Local populations, especially those who might not otherwise have access to other services, might benefit from libraries' various health and wellbeing programmes.

4.4 Health-related programme
Health-related programmes, which can be defined as library programmes that focus on health-related topics, are an important way for public libraries to reach out to their user communities. These programmes aim to raise awareness and interest in living a healthy lifestyle, promote access to quality health information, and ultimately enhance the citizen's health knowledge (Luo, 2018). Furthermore, according to Luo and Park (2013), these programmes can increase an individual's capacity to access, analyse, and comprehend the basic health information and services required to make proper decisions regarding their health. However, the value of knowledge concerning health is partly contingent on the readily available sources of information. During that period, people could obtain information from some periodicals and television and radio (Gillaspy, 2000). Nevertheless, in today's day and age, they prefer to use online seeking to satisfy their information requirements from a variety of online platforms. In a previous study by Luo and Park (2013), respondents reported that most of them used libraries for general health information needs. Furthermore, sixty per cent of the participants conveyed that libraries were among their preferred sources of health information. According to Flaherty (2013), library customers are accessing public libraries for their health information requirements; however, only a tiny percentage of public library employees are educated to locate and assess medical material. The importance of health literacy (HL) in effectively treating and managing a variety of health challenges, including both communicable and non-communicable illnesses like the Covid-19 infection, was highlighted by (Naveed & Shaukat, 2022). The authors emphasised the value of health literacy initiatives designed to cater to the various requirements of various
demographic groups. Governments must create and carry out such programmes in order to raise health literacy levels and advance improved public health preventative and care practises.

4.5 Informational Learning and Literacy
According to Shuhidan (2020), information and digital literacy have different definitions. Information literacy deals with how a person finds, evaluates, uses, and organises information, whereas digital literacy is primarily concerned with using digital technology to process information. He believes that information literacy skills require lifelong learning makes them even more critical. Information literacy, which refers to a set of skills related to accessing information, is essential to guaranteeing students' success in their academic endeavours. How lecturers help students improve their information literacy may depend on how they perceive their students' information literacy. A person can achieve all his goals until the end of his life when he achieves information literacy. Children must learn in schools, colleges, and workplaces where employees will use it. People must be able to adjust their literacy levels to match their specific areas of need. As a result, we should wait to share the material if we have any concerns about its veracity until we have done our study (facts). Libraries are trustworthy neighbourhood centres that provide a variety of advantages and services, including aided digital access, health information resources and services, volunteer opportunities, and leisure events. Numerous health and wellbeing courses offered by libraries may be helpful to local residents, especially those who wouldn't otherwise have access to other resources.

4.6 Librarians' support in improving health literacy
According to Vassilakaki, Evgenia & Moniarou-Papaconstantinou, Valentini. (2022). A thorough analysis of the identified, pertinent literature revealed six significant areas of interest: “the role of librarians in relation to the development of health literacy,” “user studies related to health literacy,” “health literacy programmes,” “health literacy and LIS education,” “health literacy initiatives,” and “tools used by librarians in health literacy projects.” New job titles are emerging for librarians (consumer health librarian, health information services librarians, and health literacy librarian), and collaboration is critical in developing and presenting health literacy training programmes to diverse groups of users and the general public. The main findings suggest that libraries as safe and trustworthy places may play a key role in developing and promoting health literacy to different groups.

4.7 Children Health Perspective Review
According to Lee, K (2020), stressed or anxious children frequently exhibit physical or behavioural changes. According to their age, unique personalities, and coping mechanisms, children react to stress differently, leading many parents to ignore the underlying problems influencing their child’s behaviour. Children cannot frequently express their genuine or imagined stressful circumstances, making it difficult to understand their anxiety. Parents may be unclear as to whether various physical and behavioural symptoms are indications of anxiety or a medical issue resulting from this. There is a feeling of well-being among children. However, lifestyle choices and future health behaviours are being formed at this impressionable age. Recent surveys of young people’s health behaviour in Europe, Canada, and the USA have revealed alarming information regarding health risk behaviour. Due to an imbalance between the requirements placed on an individual and his or her inner and exterior resources to meet those demands, stress poses a risk to health in today's society.

![Figure 1: Maslow's Needs Hierarchy Pyramid](image)

People have biological, psychological and social aspects and therefore have various needs. These needs, which can vary from person to person, follow a hierarchical order that progresses from basic physiological needs towards social and psychological needs at a higher level. Maslow’s Hierarchy of Needs Theory, which is at the forefront of the most important studies about motivation, has also created the “Hierarchy of Needs Pyramid” by putting the needs in a certain order as shown in figure 1.

5.0 The development of the framework
Various frameworks have been devised to ascertain the appropriate components that ought to be integrated in disseminating health-related information to the community. Undoubtedly, the implementation of these initiatives has the potential to significantly enhance the levels of health literacy among individuals within the community. In their seminal study, Lee et al. (2004) introduced a comprehensive
framework encompassing four interconnected components. These components include disease knowledge and self-care, health risk behaviour, preventive care and routine physician visits, and compliance with medications. The researchers proposed this framework as a means to address the complex nature of healthcare management. The primary objective of this framework was to enhance the community’s comprehension of health-related matters. The findings of the study suggest that individuals with a limited understanding of health-related subjects exhibit a tendency to partake in behaviours that are less conducive to their well-being. Furthermore, they are inclined to visit healthcare professionals less frequently for preventive measures and treatment and demonstrate a lower level of commitment to regular clinical appointments and prescribed medications. Furthermore, it is worth noting that this circumstance could potentially lead to a significant setback in accessing timely therapy, consequently leading to detrimental health outcomes.

Meanwhile, Marmot (2005) proposed a significant initiative consisting of numerous components that must be put into practice and made a part of the body of public health knowledge. This is because it creates a significant imbalance in health, in which information connected to health does not reach all targets. According to the findings of this study, knowledge concerning health should be the primary concern of decision-makers in every industry, not only those whose jobs involve formulating health policies. The ten factors highlighted in this article are the social gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food, and transportation. These aspects pertain to human requirements that involve one’s state of health.

On the other hand, McCormack et al. (2016) published a health-related framework based on social ecology models. Within the context of this model, five different levels require attention: the individual, the interpersonal, the organisational, the community, and the macro level. These levels pertain to people’s health information needs, such as health-related knowledge; attitudes; health beliefs, including fatalism; perceptions of risk and benefit; values and preferences for the level of involvement; and health literacy skills. A study by Luo (2018) gives a content analysis of the health information programmes offered by an extensive metropolitan public library system over the past year. The study aims to help professionals learn more about how public libraries can improve health literacy through successful programming and help other libraries make and power health information programmes.

![Fig. 2: Proposed Conceptual Framework](image)

The present inquiry centres around five primary subject areas: encompassing health knowledge and resources, promoting healthy physical activity, addressing basic health needs, ensuring access to quality health care, and understanding the underlying causes of health issues. In their study, Philbin et al. (2019) delved into the potential of a local library to function as a community resource at the meso level. Their aim was to explore whether such a resource could have a positive impact on the overall health and well-being of the individuals residing in the surrounding vicinity. The present study builds upon the research conducted by Philbin et al. (2019) and draws upon the earlier work of Marmot (2005). Consequently, a framework has been proposed as a direct outcome of this investigation. The present study encompassed an examination of ten distinct factors, namely the availability of health care, addiction, stress, food, early life, socioeconomic gradient, social exclusion, work and employment, disaster response, and social support. These ten elements emerged as significant areas that witnessed notable advancements. In this journal entry, we explore the significant advancements in various aspects of our society. The availability of health care has witnessed notable progress, ensuring that individuals have access to the necessary medical services they require. Additionally, the issue of addiction has been addressed with increased awareness and support systems in place to assist those struggling with substance abuse. The recognition of stress as a prevalent concern has led to the development of strategies and resources to manage and alleviate its impact on individuals’ well-being. Furthermore, efforts have been made to improve the quality and accessibility of food, ensuring that everyone has access to nutritious options for a healthier lifestyle. Early life interventions have gained momentum, with a focus on providing children with a strong foundation for their future development. This includes initiatives such as early education programmes and support for parents to create nurturing environments. The socioeconomic gradient, which often leads to disparities in health outcomes, has been a subject of attention. Measures have been taken to reduce these inequalities and promote a more equitable society, ensuring that everyone has an equal opportunity to lead a healthy life. Addressing social exclusion has also been a priority. The selection of Luo (2018) and Philbin et al. (2019) for this study is based on their contributions to the field of health-related information initiatives. These studies offer a comprehensive content analysis of
the health information programmes offered by a prominent urban public library system in the past year. This research is intended to enhance professional comprehension regarding the role of school libraries in enhancing health literacy through the implementation of effective programmes and activities. This study aims to provide valuable insights into the planning and execution of health information initiatives in educational settings. The purpose of this study is to formulate and develop initiatives in health literacy that are effective and impactful within the school library community. In order to effectively engage the school community and promote healthy lifestyles, various activities can be organised to raise awareness and generate interest. These initiatives aim to provide access to reliable health information and ultimately enhance the health literacy of citizens.

The framework presented in Figure 3 encompasses the five key variables identified in the study conducted by Luo (2018). The factors encompassed in this analysis comprise health knowledge and resources, engagement in healthy physical activity, fulfillment of essential health needs, recognition of important health needs, access to health care services, and identification of causes contributing to health issues. Furthermore, the study conducted by Philbin et al. (2019) provided the foundation for the adaptation of the variable of social support. This paper examines the various factors that exert influence on the programming and activities implemented in school libraries, with a focus on health-related initiatives.

6.0 Discussion
This study seeks to explore the involvement of school libraries in health literacy programmes and initiatives as well as identify the various components of health-related programmes within these libraries. The research is based on a comprehensive review of existing literature and current practices employed by school librarians. By examining these factors, the study aims to contribute to the existing knowledge on the role of school libraries in promoting health literacy among students. The acquisition and comprehension of information in the realm of health literacy necessitate an interactive dynamic between the individual seeking knowledge and the health professional providing it. The focus of information literacy has traditionally revolved around the strategies employed by individuals when searching for and assessing information. The impact of health literacy on educational outcomes, such as learning achievements, academic skills, and critical thinking, is significant. It empowers students to develop into independent individuals who are ethically and socially responsible members of society. The intersection of health literacy and librarianship has been an area of limited research, despite the advantageous position of librarians in their roles as researchers, lecturers, and information workers. Librarians possess the necessary expertise and knowledge to effectively tackle health literacy concerns. However, further investigation is required to fully understand and explore the potential of librarians in addressing health literacy. The librarians possess valuable expertise that enables them to play a significant role in enhancing health literacy. Their extensive experience in providing physicians with relevant information to aid in clinical decision-making, as well as granting patients access to consumer health information, positions them well to contribute to this important endeavour. The significance of health literacy has significantly increased during the COVID-19 pandemic, as it plays a crucial role in individuals’ understanding, evaluation, and utilisation of health-related information. This aspect of education has garnered considerable attention and importance. In several Malaysian states, there appears to be a notable absence of comprehensive strategies aimed at fostering health literacy education within schools. The present study aims to explore the implementation of health literacy education in school education in schools, classrooms, and professional education and training. This topic holds significant importance for both the education and health sectors. By examining the benefits associated with such initiatives, this study seeks to shed light on the potential impact of health literacy education on these sectors. The proposed strategies outlined in this research endeavour to provide practical guidance for effectively incorporating health literacy education into various educational settings. In the realm of education, the acquisition of health literacy has emerged as a pivotal skill that children must cultivate, particularly in the present era where the dissemination of health-related knowledge holds utmost significance. The accessibility of health literacy learning in schools is of utmost importance for the entire school community. It is crucial that the curriculum and activities are designed in a way that is relevant and easily understandable for students at all levels. Furthermore, it is essential that the learning experience cater to the diverse needs and demands that arise in various contexts and across different aspects of life. Ultimately, the lessons should not only benefit individuals but also contribute to the betterment of societies, ensuring that the knowledge gained becomes a valuable asset for lifelong learning. In order to achieve the desired objective, it is imperative to adopt a critical stance, foster innovation and reflective practice, and make meaningful contributions to the fundamental principles of democracy, human rights, and sustainable development.

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