VISUAL INFORMATION DESIGN OF EYE-CARE AWARENESS FOR CHILDREN

Liew Jiun Yui

Bachelor of Applied Arts with Honours
(Design Technology)
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VISUAL INFORMATION OF EYE-CARE AWARENESS FOR CHILDREN

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This project is submitted in partial fulfillment of the requirements for the Degree of Bachelor of Applied Arts with Honours (Design Technology)

Faculty of Applied and Creative Arts
UNIVERSITY OF MALAYSIA SARAWAK
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Abstract

The scenario of wearing spectacles among the kids had become a trend in this era. Nonetheless, the awareness of parents about eye-care is still low by virtue of the poor eye health promotion. Through the visual and information data analysis, information design is focused in order to improve the target audience's comprehension about the message to be conveyed through digital media.
Abstrak

Senario pemakaian cermin mata dalam kalangan kanak-kanak telah menjadi trend pada era ini. Namun begitu, kesedaran ibu bapa dalam kepentingan penjagaan mata masih kurang kerana tahap pengetahuan ibu bapa tentang kesihatan mata adalah rendah. Menerusi kajian data dan visual, penekanan terhadap infografik diketengahkan bagi memudahkan golongan sasaran memahami mesej yang ingin disampaikan dengan jelas melalui medium digital.
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1.0 Introduction to Eye-care System and Childhood Blindness in Malaysia

According to Hanutsaha (2009), Malaysia is located in South East Asia with the total population of 26.6 million. Children less than 15 years old had account for 32.4% of the population. The health care system in Malaysia is under the care of Ministry of Health. There are 362 ophthalmologists, 651 optometrists and 2418 opticians in the country. Based on the national survey for blindness in Malaysia, it is concluded that childhood blindness is one of the new targets for prevention of blindness activities (Hanutsaha, 2009). Therefore, childhood blindness is considered as an important issue in Malaysia.

There is no doubt that clear vision among young children are tremendously important as it influences their learning process including reading, observing, and other daily activities. Weak vision of eyes among children might affect their mental development in the way of decreasing self-confidence. Eye-care education among parents and children definitely plays an important role in solving the high amount of visual impairment problem in kids. Fong & Goo (2011) conducted a survey of more
than 4000 students in Gombak and it is showed that 35% of them were myopic. Among the 15-year-old group, myopia was more usual in Chinese (65%), followed by Malays (30%), and Indians (16%). Hence, it is of utmost important that health promotion should be developed in order to improve the knowledge regarding eye-care among children.

Glasses, or formally known as eyeglasses and spectacles, are frames bearing lenses worn in front of the eyes for correcting vision as well as protecting the eyes. Instead of its function as optical aid, wearing glasses has become a trend nowadays more for fashion purposes (Sutton, 2001). This situation somehow misleads the young children about the actual purpose of wearing glasses that indirectly relates to the low level of health awareness about their eyes. Furthermore, by virtue of the rates in Malaysia are not as alarming as that in Singapore, the possibility for our population to become myopic is higher because of the urbanization of the living environment that causes the deficiency of outdoor activities (Fong & Goo, 2011).
1.1 Problem Statements

1.1.1 Lack of visual guidance about eye-care for children

It is found that most of the eye health education is made and designed for the adults. The information is too difficult for the children to understand clearly. Besides that, most of the eye-care guides were presented in texts, which are too dull to attract children to read.

1.1.2 Parents found difficulties in enhancing children’s self-awareness towards eye-care

Parents found it hard to instill the good eye-care habits or awareness among their children. For example, sometimes the children might know the disadvantages of rubbing eyes, but they are not aware enough about the consequences and still practicing the bad habits.
1.2 Research Objectives

i. To identify the factors that caused the epidemic level of eyesight problem among kids.

ii. To analyse the suitable media or medium to reach the target audience.

iii. To suggest the visual information design of children's eye-care awareness.

1.3 Hypothesis

It is important to promote eye health education especially to the children in order to prevent eye diseases in future. By promoting good eye health education since young age could instill the self-awareness of children in taking good care of their eyes. In this case, visual information plays a dominant role in promoting the eye-care knowledge effectively to the kids through interesting visual designs. In addition to that, children's preference toward the graphical and visual elements shows that how important a good visual information design in attracting them visually to receive information effectively. Instead of the texts that are less comprehensive for kids, information that is presented through visuals enable the kids to be more responsive and aware of the campaign.
1.4 Scope of Research

This research is focused on the respondents who aged 10 to 12 years old in Malaysia. The eye-care information is narrowed down to the most common eye problems found among the children and Malaysians. The resources of the information gained are from reliable sources like World Health Organisation (WHO), Ministry of Health Malaysia, Association of Malaysian Optometrists (AMO) and so forth. Target audience's preferences towards visuals and medium to approach information are recorded down.

1.5 Limitation

This research is focused on eye-care awareness for children. Most of the information found from the resources is for parents and adults and it is hard to find complete eye-care information, which is provided specifically for kids. Some medical jargons are too difficult to be understood even by some adults. There is a need in filtering the information so that they are more suitable and comprehensive for children.
CHAPTER 2

LITERATURE REVIEW

2.0 Visual problem among children

Healthy eyes and good eyesight are one of the critical parts of young children’s development. According to the survey conducted by International Agency for the Prevention of Blindness (IAPB), approximately 19 million children are visually impaired in the world. Another statement made by the World Health Organization (WHO) is that 'every five seconds, one person in the world goes blind. One child goes blind every minute. It is estimated that over seven million people become blind every year'. Besides that, Fong and Goo (2011) stipulated that it is observed that most of the children in class are already wearing glasses in young ages.

It is very common to find out that most kids in the photos are wearing glasses from the children’s class photos (Fong & Goo, 2011). A survey conducted of more than 4000 students in Gombak and it is showed that 35% of them were myopic (Goh et al., 2005). In addition to that, surveys had proven that most of the myopic children are Chinese (Goh et al., 2004; Yeew, 1994).
2.1 Importance of eye-care in children

Visual problems in kids tend to emerge between 18 months and 4 years old. Early physical development and fitness can affect lifelong health in areas (Nilsen, 2010). Children are vigorous in learning during childhood. According to Freeman and Mathison (2009), childhood is an interesting and important phase in human experience, valued for its own unique qualities rather than for its resemblance to adulthood. Ignorant of parents’ attention on eye-care of their children would lead to unwanted consequences. For example, vitamin A deficiency occurs in malnourished young children and may account for over 200 000 children becoming blind each year (Marsden, 2006). Therefore, having a good eyesight is of utmost important in children’s learning process and children need to be self-aware about this issue.

2.2 Global Initiative “Vision 2020” by WHO

The global initiative known as “VISION 2020: The Right to Sight” is an established partnership between WHO and IAPB. The goal is to integrate a sustainable, comprehensive, high-quality, equitable eye-care system into strengthens national health-care systems (WHO, 2007).

In terms of the Global Initiative for the Elimination of Avoidable Blindness, a strong case must be made for the further promotion and acceptance of active community involvement in eye care service development, implementation and
evaluation (Dineen, 1998). The goal can be achieved easier through action at the national level in accordance with the dictum “Plan globally, act locally” (Resnikoff, 1998). Resnikoff (1998) again mention that

“There is a need to translate global and regional strategies into nationally applicable activities through defining national plans of action, focusing preferably on the most peripheral level possible, perhaps the district level. Such plans of action should fit the situation in which activities would be implemented”. (p.1)

According to WHO (2007), eye-care services can be improved to the maximum if the plan is implemented in collaboration with the Ministry of Health. Integration of comprehensive national plans for the prevention of blindness into the health-care system is the key to large-scale, coordinated action (WHO, 2007).

2.3 Community Eye Health in Malaysia

Community eye health, which also know as community ophthalmology is defined as a population oriented approach to eye health and disease (Marsden, 2006). Ministry of Health controls the health care system in Malaysia. According to Hanutsaba (2009), Malaysia had actually paid good effort in the success of preventing blindness activities and it focuses more on eye health system development and information system regarding eye-care knowledge. Childhood blindness and
visual impairment are considered as concerned issues in Malaysia (Hanutsaha, 2009). Furthermore, good collaboration can be seen among the Malaysian's Ministry of Health, Non-Government Organizations (NGO) such as ISEC and Association of Malaysian Optometrists (AMO), as well as the private sectors. This shows an urgency of the ministry in increasing the eye-care awareness in Malaysia. Yorston (1998) stated that

"An effective prevention of blindness programme needs official government support. The MoH representative should be sufficiently senior to act as an effective advocate for prevention of blindness within the Ministry. They should have the authority to make decisions that will affect prevention of blindness". (p.2)

2.4 Role of Visual Information Design

WHO (2007) stated that increasing recognition of the vital role of promoting means that activities must now be undertaken and accelerated in some additional areas like information, education and communication. There must be efforts to strengthen and promote advocacy about VISION 2020 by designing information, education and communication materials and campaigns. Furthermore, awareness about eye diseases and their prevention and treatment must be stimulated by locally appropriate information and dissemination strategies (WHO, 2007)
In spite of the campaign and events organized by several organization in Malaysia such as “Retinal Diseases Awareness Week” by International Specialist Eye Centre Malaysia (ISEC), “Pediatric & Therapeutic Optometry Symposium” by AMO and the list goes on, most of Malaysians are not alerted enough (Fong & Goo, 2011). This might due to the information given is less interesting and less effective being conveyed to the audience.

The discipline of information design according to Baer (2008) is defined as “the translating of complex, unorganized, or unstructured data into valuable, meaningful information” (p.12). Instructional strategies would be part of the process in designing visual information. As stated by Morrison et al. (2011),

“Once you have designed the instructional strategies, you can turn your focus to designing the message. This process uses techniques ranging from the way you structure a sentence using signal words such as “Recall in the last step…” to the use of typographical elements such as bold or italics to direct the learner’s attention. Selecting appropriate graphics, text and typographical design can further enhance the readability and the learner’s understanding of the instruction”. (p. 16)

Hence, in order to increase people’s awareness effectively, the message and information must be communicated effectively to the audience. This is because as Bergstorm (2008) asserted that effective combinations of text and images in