



## **Infographic Communication among the Nurturing Volunteer Spirit Workshop for the Campaign on Adolescent Love and Safe Sex in School-age Students**

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### **Abstract**

The purpose of this research was to study on appropriate infographic communication in the aspects of process, content, methods, techniques and applications employed in the Nurturing Volunteer Spirit Workshop for the Campaign on Adolescent Love and Safe Sex in School-age Students. This research was utilized a qualitative research design. The content, forms and methods of communication presented in the infographics concerning adolescent love and safe sex, 10 infographics derived from the Nurturing Volunteer Spirit Workshop were selected by the author using theoretical and textual concept of appropriate infographics and in depth interview conducted on 10 representatives by purposive selection from the Nurturing Volunteer Spirit Workshop, professor and students. The interview were comprised of principle, process, content, method, techniques and applications of infographics production in details. Qualitative data were analyzed in accordance with the research objectives. Data were presented in a form of descriptive analysis.

The results of the study from primary data from in-depth interview and secondary data from theories and textual analysis showed that the communication campaign on Adolescent Love and Safe Sex in School-age students through infographics, the important issues are as the following: 1) Awareness of, and emphasis on the Campaign on Adolescent Love and Safe Sex in School-age Students under the Nurturing Volunteer Spirit Workshop 2) Content employed concern on early and unwanted pregnancy 3) The process of creating infographics can be divided into 3 stages as the other media creation 4) Form and method of communication used in infographics creation should emphasize on several components such as color and tone, symbols, illustrations, numbers and fonts 5) Communication process that should be target-oriented, and 6) Role and application of infographic communication in social development

The results of this research indicated that infographics play a significant role in the Campaign, specifically in respect of health issues of Thai adolescents. Infographics were found to exhibit appropriateness in terms of content and form such they were able to capture attention, increase awareness, and induce positive attitudes and consciousness among adolescents which subsequently led to effective dissemination of useful information to the society.

**Keywords:** *Infographic, communication, adolescent love and safe sex*

### **1. Introduction**

Amid the rapid transformation of society and the emergence of modern technologies, Thai adolescents are increasingly exposed to and influenced by social media. Meanwhile, Western influences on Thai culture cause adolescents to become rapidly exposed to both good and bad media, which subsequently leads to objectionable behaviors that negatively affect the society to a broad extent. In addition, the news presented in today's media reflected the increased incidence of group sex and public sex among adolescents, such as in movie theaters and motels. These sexual behaviors undoubtedly contribute to major social problems, specifically in the aspect of unintended pregnancy, abortion, child abandonment and abortion survivors, all of which increase burdens to the society.

Reproductive health refers to "the ability of individuals to have a responsible, safe, and satisfying sexual life; the capability to reproduce and the freedom to decide if, when and how often to do so; the right to be informed and have access to safe, effective, affordable and acceptable methods of contraception of their choice; and the right of access to appropriate healthcare services that enable women to have a safe pregnancy and childbirth and a healthy infant". In 1997, the Ministry of Public Health promulgated a policy on reproductive health and redefined the term as "a state of complete physical and mental well-being as a result of a healthy reproductive system, including its functions and processes, of both men and women at all



stages of life, which enable them to live a happy life in the society” (Department of Health, Ministry of Public Health, 2015). It can be concluded that the definition of reproductive health is concerned with the reproductive system and the state of having a responsible, appropriate and safe sexual life. It also encompasses the ability of individuals to regulate their own fertility and the right to have access to effective methods of contraception and healthcare services that enable women to have a safe pregnancy and childbirth and a healthy infant.

Adolescent love and sexual activities can be observed from various social problems, including early pregnancy and sexually transmitted diseases. These problems are attributable to the fact that adolescents are at age of which they undergo numerous physical and psychological changes and sexual maturity. They begin to develop sexual attraction to others of the opposite sex and may express aggressive behavior, as well as lacking the cognitive maturity that is necessary to make healthy decisions regarding their sexuality. Likewise, there are many environmental factors in today’s world that provoke inappropriate sexual behavior among adolescents. This is particularly true for adolescents in high school and college, who start to become more independent and are therefore at higher risk in respect of reproductive health. To combat these issues, an agency responsible for monitoring and promoting reproductive health has been established in various educational institutions.

The Nurturing Volunteer Spirit Workshop was organized under “RSU Healthy Campus Project” in an effort to transform Rangsit University into a healthy university and a healthy campus. The university was funded by the Thai Health Promotion Foundation (THPF) to implement “Rangsit Health Promoting University Project” with the objectives to promote health in seven aspects: 1) Abstinence and withdrawal from smoking, drinking alcohol and drug use; 2) Food safety and nutrition; 3) Prevention of road accidents; 4) Exercise and sport for health enhancement; 5) Safe sexual activities; 6) Mental development, remedy for mental problems and social adjustment; and 7) Environmental development for health promotion. To achieve the foregoing objectives, various practices have been conducted, such as curriculum development, instructional activities, research and development, and innovation. These practices are aimed at improving health and quality of life of the target group, namely professors, students and personnel of the university, as well as ensuring a healthy environment in the university. Regarding the aspect of safe sexual activities in school-age adolescents, Rangsit University has placed emphasis on promoting knowledge, understanding and positive attitudes towards prevention and management of unintended pregnancy among adolescents. In addition, the university has attached importance to strengthening their decision-making skills and self-worth, particularly that of female adolescents, as well as raising their awareness of the consequences of unprotected sexual intercourse and the alternatives to managing their sexual desire. These initiatives subsequently induce the target group or adolescents to remain sexually abstinent until reaching an appropriate age.

Concerning the problems arising from the adolescents’ lack of readiness, the project manager has recruited volunteers who are interested in the subject and have the ability to effectively communicate and disseminate knowledge about love and safe sex to the target group and adolescents. Additionally, prospective volunteers should be capable of creating media of communication to provide knowledge, understanding and social support, as well as promoting safe sex in the target group—both high school and college students—through the use of infographics. Indeed, the term “volunteer spirit” or “public mind” was originated with the purpose to raise individuals’ awareness of their responsibilities to the public. In other words, individuals should give more than they receive and have responsibilities towards both themselves and society, as well as sacrificing their time and effort in the public interest. In that regard, it is necessary for children, youths and college students to recognize the significance of nurturing the volunteer spirit and to cooperatively participate in activities that are socially beneficial or conducive to reduction in social problems, so as to improve the quality of life and build a happier society for everyone.

An infographic is a visual representation of complex information or textual data in such a way that it can be easily understood. The key elements of an infographic consist of interesting topics or stories, visual content, and audio content. In designing an infographic, sufficient information must be collected to be summarized, analyzed, compiled, and portrayed in a graphic form in order to capture the audience’s



attention and reduce the time of content assimilation. The graphics employed, whether in a form of images, drawings, symbols, graphs, charts, diagrams, tables or maps, should be captivating, perspicuous and memorable so as to effectively communicate the Campaign on Adolescent Love and Safe Sex in School.

Regarding the aforementioned social problems associated with Thai adolescents, it is imperative to communicate the Campaign on Adolescent Love and Safe Sex in School-age students to adolescents, which can be achieved through the use of infographics. Infographics can be created by compiling and presenting complex information in a creative form such that it can be easily understood by the audience. Accordingly, the researcher is interested in studying the infographic communication of the Campaign on Adolescent Love and Safe Sex in School-age students, by collecting data from volunteers who participated in the Nurturing Volunteer Spirit Workshop. Additionally, the researcher is intrigued to examine the content, forms and methods of communication that are visually engaging and creative in order to apply them in the dissemination of knowledge for the purpose of alleviating social problems.

## 2. Objectives

1. To study associated aspects and components of Infographic Communication among the Nurturing Volunteer Spirit Workshop for the Campaign on Adolescent Love and Safe Sex in School-age students

## 3. Materials and Methods

3.1 This research was qualitative research in which data were collected from in-depth interviews. The sources of data were as follows:

- 3.1.1 The sources of qualitative data consisted of 10 infographics selected by the author from 10 teams, 2 pieces from each team infographic production derived from 50 the Nurturing Volunteer Spirit Workshop that was attended by professor and college students during 15<sup>th</sup>-16<sup>th</sup> November 2018. The content, forms and methods of communication presented in the infographics concerning adolescent love and safe sex were examined under theoretical and textual analysis principles.

- 3.1.2 The sources of personal data consisted of in-depth interviews conducted on 10 representatives purposively from the Nurturing Volunteer Spirit Workshop, comprising 3 professors and seven college students. The content of interview emphasize on the opinion, process and technique of infographic production in details.

### 3.2 Data collection

- 3.2.1 Primary data were collected from in-depth interviews conducted on participants to obtain complete and accurate data that conform to the research objectives.

- 3.2.2 Secondary data were collected through research, study, and review of related literature obtained from various sources such as library, information center, agency and other relevant electronic sources.

3.3 With respect to data analysis, qualitative data were analyzed in accordance with the research objectives.

3.4 Data were presented in a form of descriptive analysis.

## 4. Results

4.1 Awareness of and emphasis on the Campaign on Adolescent Love and Safe Sex in School-age students under the Nurturing Volunteer Spirit Workshop

It is undoubted that love and sexual activities are inevitable among adolescents, especially in colleges which are home to teenagers and adolescents who are at the age of sexual experimentation and transition from childhood to adulthood. Thus, colleges play a significant role in communicating the significance and awareness of adolescent love and safe sex. With regard to the Campaign on Adolescent Love and Safe Sex in School-age students, it served as an important tool for combating the current social issues, be it early pregnancy, sexually transmitted diseases or poor management of unintended pregnancy.



More specifically, the campaign was an effective medium for providing knowledge, improving adolescents' attitudes, and prompting college students to be aware of the appropriate practices for safe sex as well as sharing their knowledge to others in need. Meanwhile, the Nurturing Volunteer Spirit Workshop served as an alternative method of developing a pillar that can effectively communicate knowledge, promote understanding, and disseminate information, whether by means of creating media or acting as an advisor.

#### 4.2 Content employed in the Campaign on Adolescent Love and Safe Sex in School-age students

The content employed in the Campaign on Adolescent Love and Safe Sex in School-age students was centered on issues associated with early pregnancy, management of early or unintended pregnancy, homosexuality and safe sex. Owing to the fact that participants of the Project were closely related to and at risk of these issues, the participants perceived that it is imperative to promote knowledge and understanding on such issues. This reflects their interest and awareness of potential sex-related risk factors, including problems that are commonly found in the target group, which are intended to be communicated through infographics.

4.3 The process of creating infographics can be divided into three primary stages, similar to that of media creation, as follows:

4.3.1 The information search and brainstorm stage involved seeking all relevant information, such as the target group and interesting content in the form of statistics, from reliable sources of information. The content did not only encompass useful information regarding adolescent love and safe sex in school, but also social problems and issues pertaining thereto. This stage extended to brainstorming, which was conducted to determine the main topic to be presented. In addition, mind mapping was used as a tool for structuring ideas and content to produce subtopics that elucidate the main content, hence enabling broad understanding and high levels of comprehension for the audience.

4.3.2 The production stage commenced from drafting content to arranging information in a logical order, designing features, tone and font, and selecting images that correspond to the content. Concerning the fact that certain information may not be appropriate to be disseminated to the target group that predominantly comprised adolescents, a design software was employed to edit images and tone to be pertinent for the target group. Other components were then organized and laid out on a template, whereby the infographic design should be comprehensible, captivating, and reliable.

4.3.3 The review and dissemination stage involved examining the completeness, accuracy and appropriateness of the content and images, as well as ensuring that all sources of information are explicitly specified before distributing the infographics.

#### 4.4 Form and method of communication used in infographic creation

The form and method employed in creating infographics can be divided into several components as detailed below.

4.4.1 Color and tone: The color scheme used in the infographics was visually attractive and captivating; the color combinations were appropriate to the content; and the color tone was comforting and allowed for ease of understanding. It was the same opinion from in-depth interview among students participated in the workshop stated that "color and tone should be attractive, appropriate to the adolescents, should not be clouded, the combination of colors should be controlled in the same directions, not to many and various colors" (Students participated the workshop, November 29, 2018) as shown in Figure 1 and 2.



# นักคิดจิตอาสา

**RSU ร้อยเอ็ด**

## มหาวิทยาลัยรังสิต

**สถานการณ์ "ความเสี่ยง"**

### คุณแม่วัยใส

คือ วัยรุ่นที่มีอายุต่ำกว่า 19 ปี ตั้งครรภ์ขึ้นกับกิจกรรมร่วมกับคนอื่น  
มีร้อยละแปด (อายุระหว่าง 12-17 ปี)

สถิติการคลอดของ **คุณแม่วัยใส** <sup>+</sup>



**ทุก 4 นาที**  
มีเด็กเกิดใหม่ อายุ 15-19 ปี  
คลอดสูง 129,451 คน/ปี



**ทุก 2 ชั่วโมง**  
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1 คนคลอดสูง

สาเหตุการตั้งครรภ์ในวัยรุ่น



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- ➋ ใช้สารเสพติดจนทำให้ขาดสติ
- ➌ การอยู่ด้วยตัวคนเดียวจนนำไปสู่การขาด
- ➍ ไม่มีความรู้เรื่องการป้องกันที่ถูกต้อง
- ➎ ขาดการเอาใจใส่จากพ่อแม่
- ➏ ถูกหลอกลวง/ไม่มีความรักกับคนในเพศเดียวกัน
- ➐ ผู้ปกครองไม่ใส่ใจจนเกิดการมีเพศสัมพันธ์ที่ปลอดภัย

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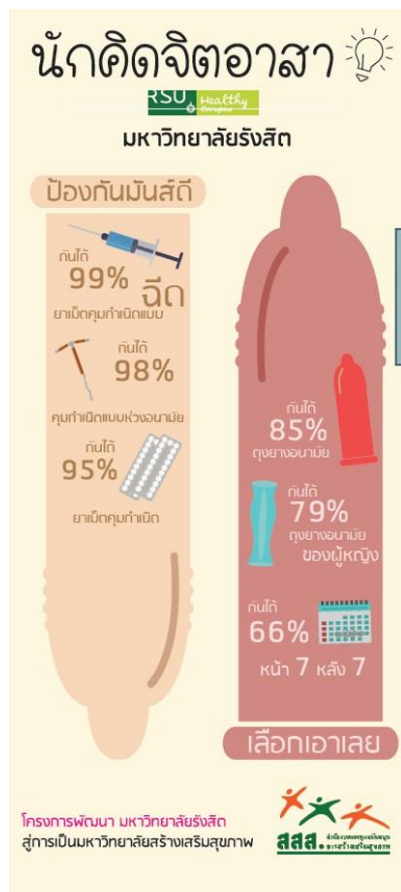


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4.4.2 Symbols: These were used to represent objects that do not require explanation. For instance, a condom was used to signify safe sex and prevention of unintended pregnancy. It was the same opinion from the interview of professors participated in the workshop stated that “Using symbols in creating infographics was very important, symbols would represent the story we want to tell without explanation. Symbols used should be appropriate as an educational media, easy understanding and not too sexually indicated.” (Professors participated the workshop, December 4, 2018) as shown in Figures 3 and 4.





**Figure 3** Infographic produced by team of innovative advertising and creative media department



**Figure 4** Infographic produced by team of content and digital media department

4.4.3 Illustrations: These were incorporated in the infographics to make minimal use of texts due to limited spaces for media creation. Illustrations also enable the audience to visualize and understand the content, while making the infographics more interesting. It was the same opinion from the students participated in the workshop stated that “The creation of infographics, the main significant objectives should be using the graphics as the pictures to tell the stories not the texts. The creation was limited in space, take limited time to see but should be interesting and indicate to understand and clear content.” (Students participated the workshop, November 29, 2018) as shown in Figures 5 and 6.



**Figure 5** Infographic produced by team of digital marketing communication department



**Figure 6** Infographic produced by team of public relations and corporate communication department

4.4.4 Fonts: The fonts used in the infographics were modern and readable. The headings were large enough to capture attention. The texts appeared in the content were of an appropriate amount and partially digested into images or symbols to be more comprehensible and enthralling. As stated by students participated in the workshop “Pictures and symbols were used more than texts in infographics, texts should be used as necessary and selected appropriately to the content. The content was sexual health and the targets were adolescents so the fonts should be up to date and traditional style because it was the health education media, written fonts might not creditable.” (Students participated in the workshop, November 29, 2018.) as shown in Figure 7.

4.4.5 Numbers: Relevant statistics were employed to complement the content and stimulate interest. Percentages were used to underline behaviors or potential problems that may occur in the absence of knowledge on safe sex. As stated by the students participated the workshop “Statistics shown in the infographics could stimulate interest, high percentage indicated the severity, risk and hazards. These perception would lead to the awareness of the following dangerous outcomes. The audiences were always interested in numbers and could see more easily before reading the texts.” (Students participated in the workshop, November 29, 2018) as shown in Figure 8.



**Figure 7** Infographic produced by team of film and television writing and directing department



**Figure 8** Infographic produced by team of digital marketing communication department

#### 4.5 Communication process for the Campaign on Adolescent Love and Safe Sex in School-age students under the Nurturing Volunteer Spirit Workshop

The components of communication consist of sender, receiver and feedback. With regard to the Campaign on Adolescent Love and Safe Sex in School-age students, the sender should have knowledge and understanding of adolescent love and safe sex in School-age students, as well as obtaining information from a reliable source. Likewise, the sender should analyze and determine the type of information sought by the receiver. Most importantly, the sender should understand the objectives of communication for the campaign, particularly the fact that it was intended to provide knowledge and improve attitudes and behaviors of adolescents. The sender should recognize the importance of content that plays a significant role in creating awareness and understanding. In addition, the sender should place emphasis on both the topics to be communicated and the use of infographics to digest content into images or symbols in order to capture the audience's attention and enhance comprehensibility. Regarding the channels of communication, infographics can be distributed through both offline and online channels. In the offline aspect, infographics may be in a form of posters or exhibition signages that can be delivered to the target group, such as schools and colleges, to be used in a campaign relating to adolescent love and safe sex. Alternatively, infographics can be distributed in a form of online media to reach the target audience or receiver—one of the main components of communication. The sender should fulfill the needs of the receiver and ensure optimal benefits pursuant to the objectives of communication. The final component of communication is feedback.





Although it might be difficult and time-consuming to measure feedback, it is imperative to do so in order to determine the effectiveness of communication and subsequently develop and optimize the communication process for the Campaign on Adolescent Love and Safe Sex in School-age students.

#### 4.6 Role of infographic communication in social development

Infographic communication reduces barriers to understanding and enhances comprehension, especially when it comes to big data. The primary feature of infographics is the ability to digest large, complex data into images and symbols that can be easily understood and capture the audience's attention to be aware of health issues. To maximize the effectiveness of communication, the method and form employed in infographic creation should correspond to the interest of the target group. Similarly, infographics should be designed such that they are appealing and captivating so as to improve cognition and promote sharing of information. All of these elements are not only conducive to alleviating social problems but also serve as a means of implanting volunteer spirit in the new generation, hence inducing them to contribute to the society. Undoubtedly, this mechanism represents a starting point for social development.

### 5. Discussion

The Campaign on Adolescent Love and Safe Sex in School-age students under the Nurturing Volunteer Spirit Workshop is necessary to improve the awareness. It is undoubted that love and sexual activities are inevitable among adolescents, especially in colleges which are home to teenagers and adolescents who are at the age of sexual experimentation and transition from childhood to adulthood. Thus, colleges play a significant role in communicating the significance and awareness of adolescent love and safe sex. With regard to the Campaign on Adolescent Love and Safe Sex in School-age students, it served as an important tool for combating the current social issues, be it early pregnancy, sexually transmitted diseases or poor management of unintended pregnancy. More specifically, the campaign was an effective medium for providing knowledge, improving adolescents' attitudes, and prompting college students to be aware of the appropriate practices for safe sex as well as sharing their knowledge to others in need. The results of this research are consistent with the concept of Chutopama (1999), which alluded to the basic psychological needs of adolescents, asserting that adolescents are at the age of curiosity and experimentation and that children principally learn through observation and imitation of others based on trial and error. For instance, punishing a child for swearing will decrease the behavior and awarding a child for speaking politely will reinforce the behavior. Accordingly, workshops are considered an auspicious activity for campaigning.

The content employed in the Campaign on Adolescent Love and Safe Sex in School-age students was centered on issues associated with early pregnancy, management of early or unintended pregnancy, homosexuality and safe sex. Owing to the fact that participants of the Project were closely related to and at risk of these issues, the participants perceived that it is imperative to promote knowledge and understanding on such issues. This reflects their interest and awareness of potential sex-related risk factors, including problems that are commonly found in the target group, which are intended to be communicated through infographics. Furthermore, the results of this research are in line with that of Ngamsanga (2009), which studied the need of Ramkhamhaeng University students for internet-based sexual education. The foregoing research found that university students expressed their need for information pertaining to pregnancy, birth control, sexually transmitted diseases, sexual dysfunction, psychiatric disorders, sexual deviation and social problems associated with sexuality.

Infographics is the useful media that can be used in health education campaign. The process of creating infographics can be divided that of media creation, as follows: 1. The information search and brainstorm stage involved seeking all relevant information. This stage extended to brainstorming, which was conducted to determine the main topic to be presented. In addition, mind mapping was used as a tool for structuring ideas and content to produce subtopics that elucidate the main content, hence enabling broad understanding and high levels of comprehension for the audience. 2. The production stage commenced from drafting content to arranging information in a logical order, designing features, tone and font, and selecting



images that correspond to the content whereby the infographic design should be comprehensible, captivating, and reliable. 3. The review and dissemination stage involved examining the completeness, accuracy and appropriateness of the content and images, as well as ensuring that all sources of information are explicitly specified before distributing the infographics. The results of this research conform to that of Tinwirat (2012), which examined the influence of infographics on the communication of complex information in the case study of “Roo Soo Flood” project. The results of the foregoing research indicated that the transformation of intricate information into a clear and concise infographic will enhance comprehension and expedite content assimilation. Thus, infographic communication is more effective than text-based communication and was found to achieve the highest level of satisfaction among the audience. This is consistent with the research of Chongpornchai, TanyasaEnsook, & Sratthaphut (2016) concerning infographics and its applications in health and pharmaceutical care. The researchers defined infographic as a visual representation of complex information that was originated from the use of images for communication in the past that later evolved into the term “infographic”. Infographics can be considered a mode of observational learning that is aimed at capturing attention of the receiver and reducing the time of content assimilation. The process of creating infographics consists of three main stages, namely analysis, brainstorm and design. The main content are initially converted into images that exhibit comprehensive, clear and concise information, which are accompanied by statistics and reference documents to add visual appeal and creditability to the content. Infographic maker tools are also employed in the process.

The form and method employed in creating infographics can be divided into several components as detailed below. Color and tone, Symbols: These were used to represent objects that do not require explanation. Illustrations: These were incorporated in the infographics to make minimal use of texts due to limited spaces for media creation. Fonts: The fonts used in the infographics were modern and readable. And numbers: Relevant statistics were employed to complement the content and stimulate interest. Percentages were used to underline behaviors. According to the results of this research, the form and method of communication used in creating infographics can be classified into color and tone, symbols, illustrations, fonts, and numbers. More specifically, symbols were used to represent objects that do not require explanation; illustrations were incorporated in the infographics to minimize the use of texts; fonts were contemporary and readable; and relevant statistics were used to supplement the content and stimulate the audience’s interest. These are consistent with the concept of Tessana (2015), which defined infographic as a creative, visual representation of complex or textual information, consisting of three main elements: topics, visual content and audio content. In the infographic design process, sufficient information must be collected to be deduced, analyzed, compiled, and portrayed in a graphic form to capture the audience’s attention and reduce the time needed for processing and understanding the content. To maximize the effectiveness of communication, the graphics incorporated in the design, whether in a form of images, drawings, symbols, graphs, diagrams, tables or maps, must be compelling, perspicuous and memorable. This further conforms to the research of Sritabutra and Intirak (2016), which studied the infographic design for the topic “Why do you fat” The results indicated that the infographic was considerably clear and concise. The color and audio content were appropriate, compelling and able to capture attention of college students. The results from this study were the same ways both from the textual analysis and in-depth interview from the participants of the workshop. The creation of infographics used as the media should consider all components such as color, tone, symbols illustrations, numbers, statistics and others in details in producing effective infographics.

The components of communication consist of sender, receiver and feedback. With regard to the Campaign on Adolescent Love and Safe Sex in School-age students, the sender should have knowledge and understanding of adolescent love and safe sex in School-age students, as well as obtaining information from a reliable source. Likewise, the sender should analyze and determine the type of information sought by the receiver. Most importantly, the sender should understand the objectives of communication for the campaign, particularly the fact that it was intended to provide knowledge and improve attitudes and behaviors of adolescents. The sender should recognize the importance of content that plays a significant role in creating awareness and understanding. In addition, the sender should place emphasis on both the topics to be communicated and the use of infographics to digest content into images or symbols in order to



capture the audience's attention and enhance comprehensibility. Regarding the channels of communication, infographics can be distributed through both offline and online channels. In the offline aspect, infographics may be in a form of posters or exhibition signages that can be delivered to the target group, such as schools and colleges, to be used in a campaign relating to adolescent love and safe sex. Alternatively, infographics can be distributed in a form of online media to reach the target audience or receiver—one of the main components of communication. The sender should fulfill the needs of the receiver and ensure optimal benefits pursuant to the objectives of communication. The final component of communication is feedback. Although it might be difficult and time-consuming to measure feedback, it is imperative to do so in order to determine the effectiveness of communication and subsequently develop and optimize the communication process for the Campaign on Adolescent Love and Safe Sex in School. The results of this research are also in line with that of Intaratayvee (2013), which examined the attitudes of Thai people towards infographic communication in social campaigns. The purpose of such research was to study the effects of infographic communication on attitudes, understanding and determination for behavioral change in Thai people. A total of three cases were examined: 1) Textual presentation; 2) Infographic presentation with images accounting for 30–60% of the content; and 3) Infographic presentation with images accounting for over 60% of the content. The results suggested that the level of attitudes, understanding and determination for behavioral change was higher in the case of infographic presentation than in the case of textual presentation. Moreover, it can be inferred that visual communication is useful for capturing attention of the receiver, while textual communication is appropriate for explaining intricate information to provide better understanding to the receiver.

Role of infographic communication in social development. Infographic communication reduces barriers to understanding and enhances comprehension, especially when it comes to big data. The primary feature of infographics is the ability to digest large, complex data into images and symbols that can be easily understood and capture the audience's attention to be aware of health issues. To maximize the effectiveness of communication, the method and form employed in infographic creation should correspond to the interest of the target group. Similarly, infographics should be designed such that they are appealing and captivating so as to improve cognition and promote sharing of information. All of these elements are not only conducive to alleviating social problems but also serve as a means of implanting volunteer spirit in the new generation, hence inducing them to contribute to the society. Undoubtedly, this mechanism represents a starting point for social development. Additionally, the results of this research conform to that of Chongpornchai et al. (2016), which studied the applications of infographics in health and pharmaceutical care. According to the results, infographics played a more active role in communication due to the increasing need for effective communication, ease of publishing academic work through multiple channels, and methods of communication that effectually promote the receiver's determination for attitudinal or behavioral change. Although there are currently no clear limitations on the construction of infographics, a good and effective infographic should be designed based on the principles of media creation. Likewise, potential factors such as the receiver's interest in the topic presented and the image-content coverage must be taken into account in order to design an infographic that successfully corresponds to the predetermined objective.

## 6. Conclusion

According to the results of this study from both primary and secondary data, infographic communication employed in the Nurturing Volunteer Spirit Workshop for the Campaign on Adolescent Love and Safe sex in School-age students are important tools using as health education media. The communication among the participants during the workshop were promoted awareness and importance of campaigning. The production of effective infographics used should consider all components: clear and understandable content, target oriented, appropriate form and methods including attractive color and tone, symbols and illustrations, fonts and also statistics contained in the infographics. In addition infographics were found to play a significant role in stimulating information sharing and contributing to social development.



## 7. Acknowledgements

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