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Cheong Lee Mei, Teoh Swee Ai

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1. **An Analysis of Speech Errors of English as a Second Language Learners in UiTM Negeri Sembilan** 1
Norfazlika Abd. Karim

2. **Autonomous English as a Second Language Writing Through Group-Writing Transformations** 25
Nalini Arumugam
Kaarthyainy Supramaniam
Geraldine De Mello
Laura Christ Dass

3. **An Empirical Discourse Analysis on Correlations between Exchange Rate and Exports** 39
Chayongkan Pamornmast
Kittisak Jermsittiparsert
Thanaporn Sriyakul

4. **Engaging Gen Y Through Social Network Sites** 53
Vincent Wee Eng Kim
Vivien Wee Mui Eik @Bee Jade

- 5. The Influences of Malaysian Animated Public Service Announcements (PSAs) on Public Health and Safety Campaign and its Effectiveness among Students** 73
Dzaa Imma Abd Latiff
Mohd Amirul Akhbar Mohd Zulkifli
Siti Nur Farah Faadiah Abd Ghani
- 6. Mixed Methods in Developmental Research** 91
Cheong Lee Mei
Teoh Swee Ai

THE INFLUENCES OF MALAYSIAN ANIMATED PUBLIC SERVICE ANNOUNCEMENTS (PSAs) ON PUBLIC HEALTH AND SAFETY CAMPAIGN AND ITS EFFECTIVENESS AMONG STUDENTS

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ABSTRACT

Public Service Announcements (PSAs) are free announcements made to promote programs, activities, community interest and services from government and the non - government sector. As technology develops, many PSAs use animated characters in order to persuade and create high awareness among people. Animation is a simulation of movement created by displaying a series of pictures or frames such as cartoons on television. Research has shown that PSAs is effective in conveying the message. However, the influences of animated PSAs among students about health and safety messages are still unclear. Previous researchers were more interested to investigate the effects of PSAs to children and less research on animated PSAs towards adults. Therefore, the researcher is interested to study whether or not the animation should be utilized as an effective tool to educate the public. A sample of 285 students watched four animated PSAs and four live action PSAs. Two of each represented animated spoke characters and non spoke characters with a goal to evaluate students' responses on positive attitudes. A correlation analysis was used to study the relationship between the positive response of animated PSAs and engagement with results that indicated moderate and high correlation. T tests were used to investigate the comparison between the students' responses to animated PSAs versus non animated PSAs and animated spoke characters versus animated non spoke characters. The results emphasize that animated PSAs received better responses among students. Students' acceptance towards animated PSAs and animated spoke characters received small but significantly better response.

The results from this study can be used by public health practitioners to influence and educate people on public health and safety among college students thus reducing preventable diseases and improving public health.

Keywords: *Malaysian Animated Public Service Announcements, Influences, Effectiveness, Students, Health and Safety*

INTRODUCTION

The media messages on teenagers' health and safety knowledge will play a crucial role. To increase the persuasive influence of the present and future mass media campaigns, it is imperative that researchers and practitioners of health promotion continue to explore and evaluate different advertising strategies and one of it is through animated public service announcement (PSA).

PSA can be defined as advertisements on issues of public interest presented at no cost as a service to the community. Through PSAs, the full creative force of a volunteer ad agency may campaign to fight social ills such as drunk driving, teenage pregnancy, AIDS, dropping out of school, prejudice and racism (Rodman, 2012). It also uses animated characters to persuade viewers and to create awareness on certain issues which can affect their attitudes and later stimulate their action in the real world.

Animated PSAs provide important messages to the society especially to their target audience. It's a vital tool in generating awareness for critical issues such as Public Health & Safety. Students learn about a variety of televised programs, including the short public service announcements aired during prime time and non primetime programs . PSAs are designed to repetitively expose students to important content ranging from the benefits of reading to health-related messages (Linebarger & Piotrowski, 2008).

The focus of this study is to determine whether animated PSAs can be a suitable mechanism in disseminating campaign messages on safety and health to students. Brackett and Carr (2001) claimed that 1,996 college students perceived traditional forms of advertising (newspaper/magazines, television, radio and catalog) to be irritating, annoying, or insulting to peoples' intelligence. However, television is still a dynamic audiovisual medium that provides a unique opportunity for information presentation to people because of its ability to attract their attention. This lead to the

question whether or not the animation should be utilized more often for television PSAs. Besides more research has been conducted exclusively on the effects of live action PSAs rather than animated PSAs.

Foreign sequels like soap opera and films which are being brought into Malaysia cultivates the strength of influence among students for them to adore and practice certain values in culture, fashion, daily socializing and surrounding that could lead to disputes in the society the blame will go back to parents in selecting appropriate TV content or the government for allowing the ‘negligence’ to happen in choosing one.

The word ‘animate’ comes from Latin, which means ‘life’ or ‘soul’ or in the passive voice, ‘instilled with life’. Animation is a synonym for the cartoon, which refers to a sequence of exaggerated hand-drawings that give an illusion of movement when flipped in succession (Kenny, 2009). Animated PSAs becoming a trend these days which offering more interactive technique in disseminating messages through sophisticated elements like 3D and graphical-base concept. These can be seen in several cartoons in films such as the *The Lion King*, *Toys Story 3*, *Shrek 3*, *Puss in Boots*, *Tarzan* etc.

Therefore, the focus of this study will be concentrate on how animated PSAs may offer education and entertainment values to students that could influence them to understand the health and safety message and change their attitudes and mentality in order to respond to such TV content. Thus, we are investigating the influence of animated PSAs and its effectiveness among students to address the following research question:

Research Question: Is there a relationship between students’ response to animated PSAs and its effectiveness?

ANIMATED AND LIVE ACTION PUBLIC SERVICE ANNOUNCEMENTS

PSAs are defined as an advertisement “for which no charge is made and which promotes programs, activities, or services of federal, state, or local governments or the programs, activities, or services of nonprofit organizations or any other announcements regarded as serving community interests.” (LaMay, 2002). Today, PSAs use animation techniques and characters in delivering more powerful impact on viewers in order to create awareness of certain issues which will later stimulate their action in the real world.

As studied by Kelly and Soloman in 1975 on children's television, they did not clearly define the meaning of "animated PSAs". However after ten years, a more refined look at animated PSAs' definition has been made (Muir, 2005). Thus, the animated PSAs is defined as only line drawings, and made a distinction between a fully-animated ad and one that combined animation and live action (Bush, Hair & Bush, 1983)

The traditional medium for government agencies and non profit organizations to deliver messages to the public is through PSAs, which typically are broadcasted through television and radio, outdoors such as billboards and in print (newspaper and magazine) advertisements aimed to increase awareness, reinforce positive beliefs, intensify personal concerns and move people to take action. Currently, animated PSAs can be found on the Internet and Smartphones and other mediums such as television.

As claimed by Von Flotow (2005), the importance of PSAs can be seen through the production of Firdhaus Kharas, a Canadian's top media producer and former Executive Producer of the United Nation Association in Canada. He produced a series of animated PSAs about preventing HIV/AIDS called *Three Amigos*. The series has won 30 international awards including prestigious Peabody Awards. His animated PSAs were well received and have become a powerful communication tool in contributing towards the campaign against HIV. Meanwhile, examples of Malaysian animated PSAs are *Prevent Dengue PSA*, *Malaysian Local Product PSA*, *Seat Belt Safety PSA*, *Together Stop Corruption PSA*, *Healthy Lifestyle PSA*, *Anti Stress PSA*, *Green World PSA*, *Drug PSA* and many more.

Hence, the first null and alternate hypotheses are:

H_{01} : students will not likely to respond to animated public service announcements than live action public service announcements when evaluating on positive responses (entertaining, informative and believable).

H_1 : Students will be more likely to respond to animated public service announcements than live action public service announcements when evaluating on positive responses (entertaining, informative and believable).

ENTERTAINMENT AND EDUCATION MESSAGES IN ANIMATION

The field of entertainment-education is defined as the process of purposely designing and implementing a media message to both entertain and educate which in turn influences behavior and contributes to favorable attitudes (Singhal & Rogers, 2001). Malaysian first animation began with the establishment of the Malayan Film Unit (MFU) in 1946 whose main function was to produce a public service announcement. *Hikayat Sang Kancil* (The tale of the Mouse Deer) was the Malaysia first short animated. Most of the animation was about Malay Folklore such as *Budi Baik di Balas Baik* (Kindness be gets Kindness), *Gagak yang Baik* (The Good Crow) and many more (Hassan, 2007).

According to Singhal and Rogers (2001), ‘entertainment-education’ can be a useful component of communication campaigns on a variety of subjects. An example of successful animation entertainment-education in Malaysia is *Upin and Ipin* as shown on TV9, garnering a total of 1.5 million viewers (Hizreen , 2010). *Upin and Ipin* a children animation TV series aimed at educating children about their first experience of fasting in the month of Ramadhan. This animation is being presented in such a simple way, comprehensible, comical and hilarious (Les’ Copaque Production, 2010). *TV Pendidikan Indonesia* (Indonesian Education TV) claimed that *Upin and Ipin* has become the most watched education programs for children. Children can learn moral values through the show without feeling that they are being nagged (Khairul, Beh & Raman, 2010).

ANIMATED SPOKE CHARACTERS

Research has shown that animated spoke characters promote high attention, recognition, association, and liking. Callcott and Phillips (1996) claimed that spokes character is described as a cast of the fantasy world that used to sell a product or service. Stout (1990) stated that spokes characters can imply a relationship between fantasy and product, support human counterparts (spokes person) whose function is to speak on behalf of a product and present it in the form of visual. Non-celebrity spokes characters are called trade characters (Norris, 1990), which include “people, animals, animated characters, objects or a trademark is identified with a brand”. Spokes characters can be identified as a visual identification or personification of

a particular brand of merchandise or of a particular advertiser (Callcott & Lee, 1995).

An indepth interview conducted by Callcott and Phillips (1996) about spoke characters, suggested that “personality, physical characteristics, humor and consumer experience factors are the key to likeable animation fictional spoke characters”. A fictional spoke characters also allows for tailoring to the exact customer needs (Tom, *et al*, 1992). Another advantage in using animated spoke characters is that the same character can carry a message from generation to generation, that have appeared in various media for several generations (O’Keefe *et. al.*, 1996).

Research has studied that the correlation between a spokes-character’s image and a hedonic atmosphere are very significant (Chandon, Wansink & Laurent, 1999; Johar & Sirgy, 1991), which might influence advertisement effectiveness. Hedonic advertisements with spokes-characters generate more alluring promotions and consumer involvement than utilitarian advertisements (Shavitt, 1992; Wakefield & Barnes, 1996).

Thus, the next testable hypotheses are:

- H₀₂: Students will not likely to respond to animated spoke characters than animated non spoke characters when evaluating on positive attitude (attractive, trustworthy, influencing).
- H₂: Students will be more likely to respond to animated spoke characters than animated non spoke characters when evaluating on positive attitude (attractive, trustworthy, influencing).

ANIMATED PSAS ENGAGEMENT

Cismaru (2006) advocated that four elements that determine the effectiveness of PSAs: perceived vulnerability, perceived severity, the efficacy of the recommended changes and the personal cost of adhering to the change. According to Du Plessis and Brown, recall and persuasion are the primary measures of advertising effectiveness. Many different metrics have been used to measure advertising effectiveness including awareness, top of mind, attentioning, response, recognition, and 30 recalls as predictors of engagement (Romaniuk, Sharp, Paech & Driesener, 2004).

Starch (1923) offered that if advertising were to be effective it must first get noticed, then read, comprehended, believed, and ultimately acted upon. Wells (2000) added that recognition is the best method to measure interest in advertising; meanwhile recall is best at assessing how meaningful a message (brand) actually is.

METHOD

In justifying the influence of animated PSAs and its effectiveness students, the research had replicated partial components of a previous research that used to measure commercial advertising factors by Ohanian (1990). The variables include demographic characteristics, students' response on animated PSAs versus life action PSAs, animated spoke characters versus animated non spoke characters and PSAs engagement.

Eight animated PSAs and life action PSAs were used for this study and were shown to students before responding to the survey. The researchers have selected two PSAs from famous production house in Malaysia (named *Les Copaque Sdn Bhd*) which produced TV cartoon called *Upin* and *Ipin*. Meanwhile four PSAs were chosen from Ministry of Health, Malaysia and two PSAs from Ministry of Communication and Multimedia Malaysia. Below are the details:

Four animated PSAs:

1. "Road Safety" produced by *Les Copaque Sdn Bhd*.
2. "Seat Belt Safety" produced by *Les Copaque Sdn Bhd*.
3. "Prevent Dengue" produced by Ministry of Communication and Multimedia Malaysia.
4. "Healthy Lifestyle" produced by Ministry of Health Malaysia.

Four life action PSAs:

1. "Drug Abuse" produced by Ministry of Communication and Multimedia Malaysia.
2. "Prevent HINI" produced by Ministry of Health Malaysia.
3. "Stop Smoking" produced by Ministry of Health Malaysia.
4. "Healthy Food" produced by Ministry of Health Malaysia.

The questionnaire package was hand-delivered by the researcher to 285 respondents. This package consisted of a consent letter asking individuals to volunteer participating in the study. Surveys for this study were conducted in a classroom before class ended. Likert scales were used to discover opinions on various aspects of issues and respond. Students were asked to choose high, moderate or low response when asked about their concern on public health and safety. The questionnaire forms are analyzed using the SPSS version 20.0 for Windows and data are presented in table form.

The population of this study was conducted among students from the Faculty of Communication and Media Studies, UiTM Malacca, Alor Gajah, which included all semesters (semester one until six). The reason why we select Communication and Media students in our study is because the research topic itself is very much synonymous with media studies. The students can differentiate and recall which are PSAs, animated PSAs, advertisements, promo, teasers and many more. Therefore, we find out it is easier for us to conduct this survey among them. The size of the population is 1,107 (N=1,107). The sampling from this population was 285 respondents based on "Table of Sampling" by Krejcie and Morgan (1970).

There were 285 respondents involved in this survey. According to the respondents' demographic profile (Table 1), there were four different age group categories, ranging from 17 years to 24 years and above (mean=2.329, sd=0.596). Most of the students were semester one until four at this range of age. The female respondents made up about 171 samples (60%) of the study while male respondents were 114 people (40%, mean=1.400, sd=0.490). Most of the students came from Selangor (25.3%), followed by Kuala Lumpur (17.2%), Johor (11.9%), Perak (6.3%) and the lowest was Perlis (0.7%).

Table 1: Demographic Profile of Respondents (n=285)

Demographic Profile	Frequency	Percentage (%)
Age		
17 years	5	1.8
18-19 years	189	66.3
20-21 years	79	27.7
22 – 24 years	11	3.9
(Mean=2.329, SD=0.596)		
Gender		
Female	171	60
Male	114	40
(Mean=1.400, SD=0.490)		
State		
Selangor	72	25.3
Melaka	16	5.6
Negeri Sembilan	14	4.9
Pahang	10	3.5
Pinang	18	6.3
Kedah	17	6.0
Kelantan	7	2.5
Terengganu	7	2.5
Johor	34	11.9
Perak	18	6.3
Sabah	7	2.5
Sarawak	14	4.9
Perlis	2	0.7
Kuala Lumpur	49	17.2
(Mean=6.936, SD=5.102)		

Table 2: Students’ Perception of Public Health and Safety Issues Shown on Animated PSAs (n=285)

No	Items	Percentage (%)		Mean
		Moderate response	High response	
1.	Concerned about public health and safety issues	7.4	92.6	2.926
2.	Proactive about public health and safety issues	15.1	84.9	2.849

Table 2 indicated students’ perception of public health and safety issues shown on animated PSAs. The result stated that most of the students were very concerned and proactive about public health and safety issues where majority stated high response (92.6%, 84.9%) compared to moderate (7.4%, 15.1%)

Table 3: Results of Paired Sample t Test of Students’ Response between Animated PSAs and Life Action PSAs

Positive response: (Entertaining, Informative, Believable)	Mean	t	Sig
Animated PSAs	2.8211	-5.558	0.000
Real Action PSAs	2.6561		

*p<0.05

The score that indicated positive responses towards animated PSAs and life action PSAs were combined into cumulative scores for each with higher response showing stronger feeling or attitude towards these announcements. Total scores were compared using paired *t* test. The finding showed that mean for animated PSAs and life action PSAs were 2.8211 and 2.6561, based on n=285. The value of *t* = -5.558, with *df* = 284 and *p* = 0.000. Therefore, this showed that animated PSAs received a small but significantly better responses than live action PSAs based on comparison of mean and *p*<0.05 as indicated in Table 3. Thus, *H*₁ finds support and reject *H*₀₁.

As claimed by Singhal and Rogers (2001), entertainment-education can be a useful component of communication campaigns. McBean and McKee (1996) added that “major asset of animation is its facility to communicate sensitive issues without being alienating audiences”. Thus it’s easier to deliver messages without being blamed by another party and acceptable for all audiences.

Table 4: Results of Pearson Correlation Coefficient between Students’ Response of Animated PSAs and Engagement

Animated PSAs engagement Positive response (Entertaining, Informative, Believable)	r	p
Willing to discuss and share with friends or family	0.413	
0.003		
Willing to email with friends or family	0.722	0.002
Willing to share on FB and Myspace	0.766	0.008

*p<0.05

The score that indicated positive responses towards animated PSAs and students’ commitment were combined into cumulative scores for each with higher response showing stronger feeling or attitude towards these announcements. Total scores were analyzed using Pearson Correlation. The results from table 4 showed that there was a strong positive significant relationship between positive response to animated PSAs and students’ commitment. Meanwhile r values for positive response (willing to discuss and share with friends and family) indicated ($r=0.413$) showed moderate correlation (refer Guilford Rule of Thumb). Other commitments (willing to email with friends and share on *Facebook/Myspace*) indicated a high correlation (refer Guilford Rule of Thumb). Babbie (2007) explained that Guilford’s rule of thumb was used to understand degree, size, strength and magnitude of relationship of Pearson Correlation Coefficient (r). Below are the details:

- r=0.00-0.29 (Little or negligible relationship).
- r=0.39-0.49 (Low relationship).
- r=0.50-0.69 (Moderate or marked relationship).
- r=0.70-0.89 (High relationship).
- r=0.90-1.00 (Very high relationship).

As studied by Marcelo (2007), PSAs with the Internet as a medium can provide an effective way in raising awareness levels, building message recall, and influencing behavior changes among college students. Nasco and Bruner (2007) added advances in technology have expanded the availability of media to reach consumers and to expand consumer experience. Meanwhile, Lenhardt and Maiden (2007) claimed that college students were more likely to frequent online and social networking for news, announcements, entertainment, and information.

Table 5: Results of Paired Sample t Test of Spoke Characters and Non Spoke Characters of Animated PSAs

Positive attitude (Attractive, trustworthy, influencing)	Mean	t	Sig
Spoke characters	2.9568	-11.322	0.000
Non spoke characters	2.6439		

*p<0.05

The score that indicated positive attitudes toward animated PSAs and students’ commitment were combined into cumulative scores for each with higher response showing stronger feeling or attitude towards these announcements. Total scores were compared using paired t test. Spoke characters for animated PSAs reported a mean of 2.9568, compared to animated non spoke characters 2.6439 based on n=285. The value of $t = -11.322$, with $df = 284$ and $p = 0.000$. Therefore, this showed that animated spoke characters received a small but significantly better response than animated non spoke characters based on comparison of mean and $p < 0.05$ as indicated in table 5. Thus, H_2 finds support and reject H_{02} .

This indicates that spoke characters in animated PSAs played an important role towards the effectiveness of animated PSAs. Stafford, Stafford and Day (2002) supported that animated spoke characters would be best for advertising hedonic services (more “fun” or “pleasurable”). This can be seen through *Les Copaque*’ animated PSAs where the characters and story lines are more fun, attractive and enjoyable to viewers. As claimed by Callcott and Lee (1996) using animated characters as endorsers can be very attractive to audiences.

CONCLUSION

The research strongly supports the use of animation for public service announcements due to statistically significant response received. Animation received good response for entertainment programming but how effective this method being used for education purposes. The findings can be concluded that animated PSAs in educating public health and safety message among students especially from entertainment programming may result in memorable and enjoyable feelings. Respondents' positive responses towards students' engagement in emailing, sharing on Facebook and Myspace on animated PSAs showed high correlation as indicated in research question.

These allow students to share and discuss with family and friends either through television or email and social networking. In addition, by using animated spoke characters in PSAs would be an alternative way to promote animation programs. Thus it could give benefits such as free promotions for the company seem PSAs are non profit advertisement. In addition, these findings may encourage animation production to produce more animated PSAs to TV stations in order to educate healthy lifestyle to the public especially students.

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